MEDICAL RECORD

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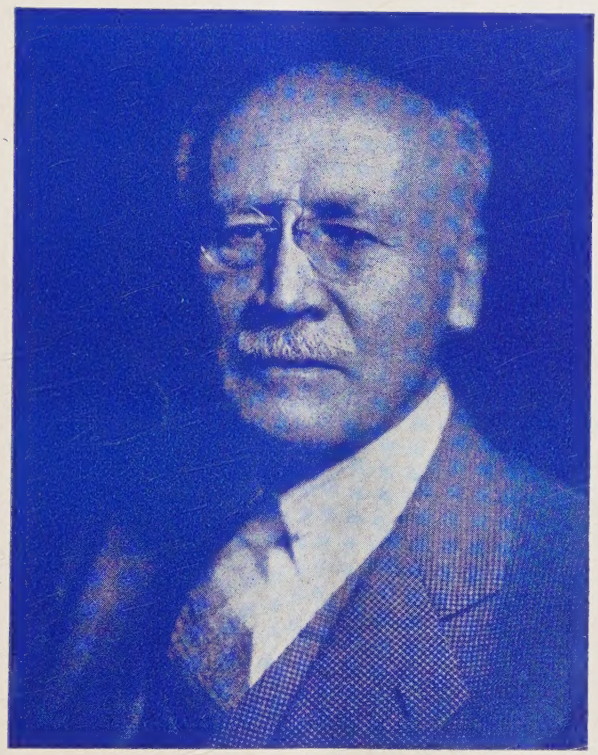

ROBERT TAIT McKENZIE (1867-1938)
Eminent American Physical Therapist and Sculptor
Symposium on Neuropsychiatry, page 409

July 1943

Vol. 156, No. 7

Rx: Archaic

"Asparagus tied up as an amulet or drunk as a decoction will prevent conception and render one sterile."
—DIOSCORIDES*

• The evolution of contraceptive products is an interesting chapter in the history of medical achievement and scientific progress. A little over a decade ago, there were few authoritative requirements for these preparations. Today, physicians prescribe Ortho-Gynol with complete confidence.

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Strict adherence to ethical principles through the years has made Ortho-Gynol the most widely prescribed preparation of its kind.

*Himes—*Medical History of Contraception*

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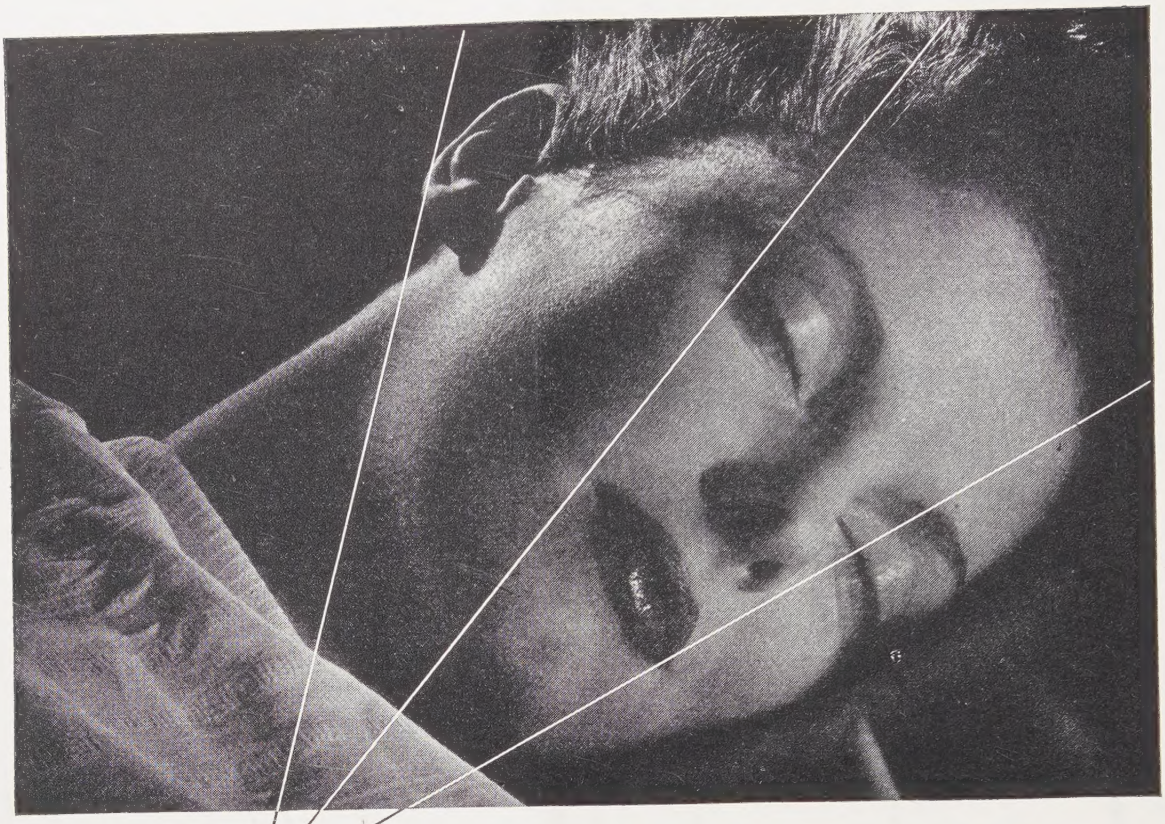

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JULY 1943

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Excellence in War Production

FOR developing and producing Sterile Shaker Packages of Crystalline Sulfanilamide especially designed to meet military needs, for supplying Mercurochrome and other drugs, diagnostic solutions and testing equipment required by the Armed Forces, and for completing deliveries ahead of contract schedule—these are the reasons for the Army-Navy "E" Award to our organization.

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Open Forum

Sanity in Psychiatry

To the Editor:

The following item was clipped from the *Journal of the American Medical Association,* June 5, 1943:

Chicago

Course on the Rorschach Test.—Michael Reese Hospital offers a course on the Rorschach test, June 7-11, under the direction of Samuel J. Beck, Ph.D. Emphasis will be placed on those less serious mental disturbances in which success in treatment is indicated. The course will be in session in two two-hour periods daily for five days. Communications should be addressed to the department of neuropsychiatry, Michael Reese Hospital.

My only reason for sending this communication is to make a plea for more sanity in psychiatry.

Among my souvenirs I have a small booklet, made of semi-blotting paper, which was used as a favor and for pleasant diversion at parties in the "dear dead days beyond recall". All guests signed their names in the booklet and pressed the leaves together, which left weird figures at which all laughed and made merry over the grotesque imprints.

Now, this child's play has actually been evolved into a scientific procedure whereby the fortune tellers are able to divine or presage the future of harassed, helpless mental patients, for no reason at all except to make a white collar job more morbid. I never did see the benefit any patient ever derived from a psychologist's management of the mentally sick, to say nothing of the hopeless despondency created in an innocent child and the tormented parents by this I.Q. nonsense. Of what use is the report card if a psychological test tells so much? In short, it makes me think of the wonderful works of a wheelbarrow.

Psychiaters suffer enough from the "strange people" attitude of the layman without having this new test thrust upon them by the Ph.D. schoolteacher. Once upon a time, when I was an intern in a hospital for the insane, there was a psychologist on the staff who practiced some of these weird hocus pocus tests, making high sounding mental diagnoses (without the benefit of an M.D. degree) upon unsuspecting patients who did not know and, incidentally, neither did the psychiatric staff know, that this person was suffering from a brain tumor from which he died in later years, but not at this hospital.

Another psychologist had a room on the same floor where my quarters were situated. She had a morbid fear of contracting some malignant disease (knowledge was just hearsay on top of hearsay about pathology), and would go into a large lavatory which had adequate accommodations for a large personnel, would lock the door, and then she would wash by hand her own unbleached muslin bedding, etc., remaining in the room for an unlimited period, notwithstanding the fact that the hospital supplied excellent linen and had a fine laundry.

The mental patients, who did the house cleaning on this floor, all complained that the doctors should be given a mental examination. Thereby hangs a tale.

Rose Alexander, M.D
Los Angeles, Calif.

Function of Health Departments in Civilian Protection

Operations Letter No. 131 has been sent from the Office of Civilian Defense, Washington, D. C., to all regional directors for the purpose of clarifying health department functions in civilian protection. Other material outlining the technical operations of the health department in the event of air raids or other wartime disasters is being prepared.

This letter outlines the duties of the health officer as follows:

The Health Officer, as a member of the staff of the Citizens Defense Corps, should develop plans for prompt and appropriate action during and after air raids or other disasters to assure, 1, the maintenance of safe water, food, and milk supplies; 2, sanitary disposal of sewage and putrescible wastes; 3, sanitation at mass feeding centers, rest centers, casualty stations, billets, and other temporary facilities for war emergencies; 4, control of communicable diseases.

Planning should include the mechanism for mobilizing essential personnel during and following an actual emergency, as well as arrangements for immediate instruction of the public in emergency sanitary measures in event of disaster. The Health Officer should review the plans and inspect the facilities of other services of the Citizens Defense Corps in order to eliminate potential health hazards.

Hospital Units of Emergency Medical Service

One hundred and ninety-one hospitals and medical schools have been invited by the Surgeon General of the U. S. Public Health Service to organize affiliated hospital units of the Emergency Medical Service of the U. S. Office of Civilian Defense. These units will be activated only in event of a grave military disaster affecting the civilian population or military personnel in the area in which the parent hospital is located. Activation of a unit will take place only upon recommendation of the State Chief of Emergency Medical Service and the Office of Civilian Defense Regional Medical Officer, subject to certain limitations imposed by the Surgeon General and the Chief Medical Officer of the Office of Civilian Defense and by agreements with the invited hospitals.

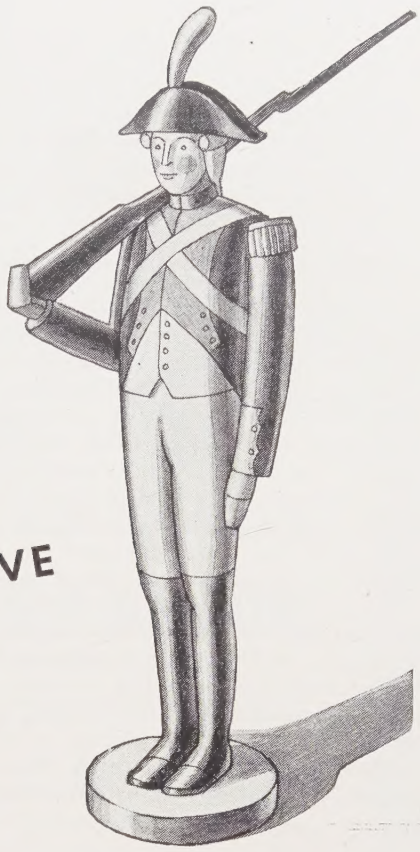
The rules governing activation of affiliated units may be summed up as follows:

1. Members of the staffs of affiliated units are commissioned in the inactive reserve of the U. S. Public Health Service. They will remain on inactive status for the duration of the war unless urgent need for their services should arise in their region because of an air raid or other grave wartime disaster.

2. The two specific purposes for which a unit may be activated are: (a) For duty in an Emergency Base Hospital to which civilian casualties and other hospitalized patients must be transferred because a community is under enemy attack and one or more of its hospitals must be evacuated. (b) For temporary duty to assist the armed forces at the time of an extraordinary military emergency which may temporarily overtax local military hospital facilities.

Since affiliated units are organized by the Medical Division of the Office of Civilian Defense as part of the Emergency Medical Service of their States, they

(*Continued on page 392*)



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will be expected to provide aid only in their own or neighboring States. A unit organized from the staff of a teaching hospital of a medical school will not be called unless the hospital itself must be evacuated or unless there is no unit from a non-teaching hospital to meet the emergency need. The period of obligation for service will cease at the termination of the present national emergency. A commission in the inactive reserve of the U. S. Public Health Service does not prevent a member of an affiliated unit from entering the armed forces; resignation will be accepted for this purpose.

Manual of Industrial Nutrition

This is the first of a series of pamphlets which will be prepared and distributed monthly by the Nutrition Industry Division, Nutrition and Food Conservation Branch, Food Distribution Administration, Washington, D. C. Dr. Robert S. Goodhart, chief of the Nutrition in Industry Division, says that there is evidence that many of the usual practices associated with the preparation and service of food in plant cafeterias and restaurants result in serious losses in food value. The effect that these food losses may have on absenteeism and production is outlined in the booklet. Workers whose diet is deficient in vitamin B_1 develop fatigue, lassitude, and loss of appetite. Depressed mental states, muscle soreness, backaches also develop and the capacity for work decreases, according to results of studies outlined in the manual.

Copies of the booklet are available on request from the Nutrition in Industry Division, War Food Administration, Dept. of Agriculture, Washington, D. C.

Bibliography of Infantile Paralysis

A complete bibliography of all scientific literature pertaining to infantile paralysis is being compiled by The National Foundation for Infantile Paralysis, and is expected to be ready for publication in book form in the early part of 1944. The first volume will contain a record of all scientific material on poliomyelitis published in the world up to the end of 1943. Subsequently, the data will be kept up to date by the publication of annual supplements. Brief abstracts of the more important articles will be included in the bibliography.

This complete international bibliography on infantile paralysis will make available to the medical world data that will acquaint research workers with investigative work that already has been done in connection with the many aspects of the disease, and will make available for medical men throughout the world complete information pertaining to infantile paralysis articles published in any language.

The compilation of the information is being carried out for the Foundation with the aid of the library of the American Medical Association and the John Crerar Library, both in Chicago, under the direction of Dr. Morris Fishbein, and Dr. Ludwig Hektoen, Chicago.

The International Committee for the Study of Infantile Paralysis, organized by Jeremiah Milbank in 1928 and discontinued in 1932, had collected data pertaining to all literature regarding the disease that had been published up to that time. These data, now the property of the Library of the New York Academy of Medicine, have been turned over to the National Foundation for inclusion in the publication.

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MENNEN ANTISEPTIC OIL
By helping to keep the infant free of many rashes and skin infections, Mennen Antiseptic Oil may often save avoidable calls. It is the only widely used baby oil that does all these three things:
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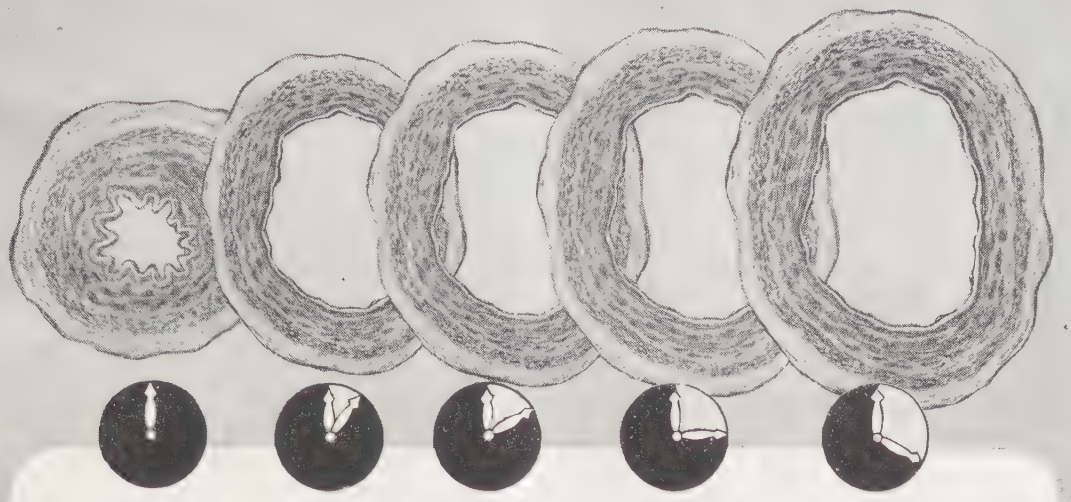

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NITRANITOL

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in Hypertension

Due to the chronicity of hypertension, the object of medical treatment is to produce gradual and prolonged vasodilation, with a resultant steady lowering of the systolic and diastolic pressures.

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The prolonged vasodilating action of mannitol hexanitrate as compared with other hypotensors is best shown by the following table based on results of the work of Matthew, as summarized by Sollman. (Manual of Pharmacology, Philadelphia, W. B. Saunders & Co., 1942, p. 518)

DRUG	DOSAGE	EXTENT OF FALL in mm. Systolic Blood Pressure	REACHING AND RETURNING FROM MAXIMAL FALL ▒ MAXIMAL FALL MAINTAINED ■
Spir glyceryl nitratis	2-3 mins	25 - 30	
Sodium nitrite	2-3 grs	32	
Erythrityl tetranitrate	½-1 gr	35	
Mannitol hexanitrate	1 gr	35	

Hours 1 2 3 4 5 6 7 8 9 10 11 12 13

Nitranitol is prepared in the form of scored tablets, each containing ½ gr. mannitol hexanitrate. Average dosage is one or two tablets every 4 to 6 hours. Available at prescription pharmacies in bottles of 100.

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A combination product containing ½ gr. mannitol hexanitrate and ¼ gr. phenobarbital. Scored tablets in bottles of 100.

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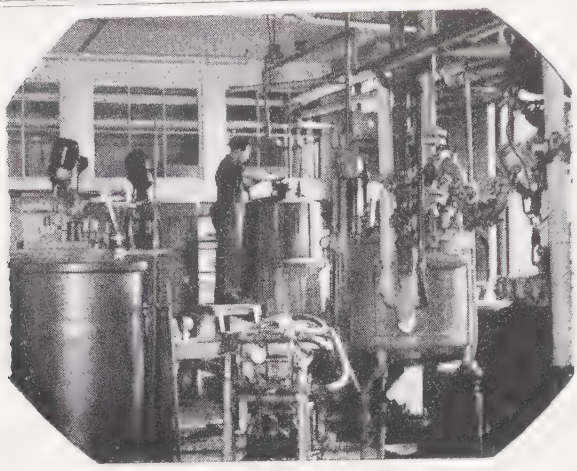

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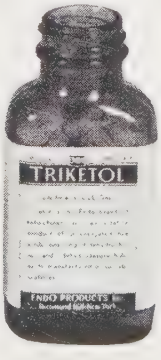

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The First Medical Bulletin

Dr. C. E. Lakin, in his annual oration to the Medical Society of London on May 10th, traced the first medical bulletin very far back in the world's history. The bulletin was an oral one, given, like Mussolini's pronouncements, from the window of a Roman palace; its author was a woman, and it was false. The wife of Tarquinius Priscus, the fifth of the early kings of Rome, had a female slave who gavé birth to a son, and as there were flames around his head and other supernatural manifestations, the queen adopted him, and on reaching manhood, he, Servius, Tullius, married the king's daughter. The sons of the former king, Ancus Martius, whom Tarquinius had supplanted, resolved to seize the crown, and hired two shepherds to assassinate Tarquinius in his place, which they did. Thereupon the queen ordered the palace to be closed, caused the shepherds to be arrested before they could escape, bade her adopted son Servius Tullius play the man, and herself went to the open window and declared to the Roman citizens that the king had only been stunned by a blow, that the weapon had not penetrated deeply, that the wound had been examined and the blood wiped away, that the symptoms were favorable, and that, the king having recovered consciousness, he desired that Servius should act for him until he was fully restored. By this clever bulletin, false though it was, she defeated the designs of her enemies, who, hearing that there was every prospect of the King's recovery fled from the city, and by the time the king's death could no longer be concealed Servius was in unquestioned authority. The word "bulletin" in such a connection is, of course, a comparatively modern use. Meaning an official statement as to the health of an invalid, it appears to date from 1765, when Horace Walpole wrote from Paris that the Dauphin (the son of Louis XV) was at the point of death. "Every morning the physicians frame an account of him, and happy is he or she who can produce a copy of this lie, called a 'bulletin' ". —*Brit. Med. Jour.,* May 29, 1943.

Endocrine Disturbances in Children

I. Jaffe and G. Brockway, Brooklyn, N. Y. (*Jour. Clin. Endocrinol.,* March 1942) discuss the use of the male sex hormone in endocrine disturbances in children. Fourteen males, sixteen years of age and younger, with endocrine disturbances, were treated with testosterone propionate by inunction and methyl testosterone administered orally, also apparently testosterone propionate by injection. The use of ointment and the oral administration of tablets were found to be more efficacious than intramuscular treatment in children. No deleterious side effects were noted. Seven boys with infantile genitalia were treated and five were so improved that they were discharged. Five cases of cryptorchidism were treated; only one cryptorchid testicle descended. Four of these boys showed an increased rate of growth. One atrophic testicle was increased in size. One eunuchoid patient improved remarkably on the therapy employed. The dosages varied a great deal; by injection of testosterone propionate, ten mg. from one to three times weekly; by inunction of testosterone propionate, four mg. daily for several weeks; and methyl testosterone orally in amounts of from thirty mg. per day to ten mg. two or three times weekly.

"What you need, Jim, is some o' them vitamins"

Cracker-box therapy—America's newest "indoor sport!" Now the *grocer* turns physician-pharmacist—blithely prescribes "them there vitamins" for all of mankind's ills.

"Too many vitamins can't hurt you," is not a critically circumspect statement. Obviously, however, the chief objection to cracker-box prescribing isn't fear of what the *vitamins* might do to the "patient", but what the *wrong diagnosis* might do.

True, "Jim" may have a case of avitaminosis; but how can a layman tell? What if he has a peptic ulcer? Or tuberculosis? Or cancer? What Jim really needs isn't the wild guess of a grocer, but a thorough check-up by a competent diagnostician.

The makers of B-*Natural* Vitamin B Complex don't believe the proper outlet for vitamins is the grocery, or variety store. They don't believe vitamins are indicated for all aches and ills any more than were the curealls of a by-gone age.

The makers of B-*Natural* believe that only a qualified physician is competent to determine whether there is need for vitamin supplementation. So they believe vitamins should be prescribed *only* by physicians—sold *only* by registered pharmacists.

In line with this policy, B-*Natural* is advertised only to physicians—sold only through qualified druggists.

B Natural VITAMIN B COMPLEX TABLETS

B-*Natural* tablets are composed of pure, highly potent, dried brewers' yeast and the richest natural source of riboflavin. They are small enough for most people to swallow easily, but since they are palatable and uncoated, they may be permitted to dissolve in the mouth like a lozenge if one prefers.

Four of these potent tablets furnish the new minimal adult daily requirements of thiamin (1 mg.) and riboflavin (2 mg.) and substantial quantities of the other B-Complex factors. B-*Natural* may also be had in powder form. For professional samples and covering literature, sign and mail the coupon.

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The detailed reports of the tests mentioned, and other informative *Lygel* literature, are available to you on request.

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Sources of Vitamin C

The value of fruit juices has been known for more than three centuries, and orange juice has been used for many years on account of its antiscorbutic properties. In 1754, James Lind (1716-1794), a native of Scotland, published a classical treatise on scurvy, in which it was demonstrated that the disease could be cured rapidly by the use of lemon juice. Not long after the publication of Lind's work, Stark twice induced scurvy in himself, as a result of which he died.

The reason for the efficacy of lemon juice in scurvy was not understood until the medical value of some of the vitamins had been investigated. In 1925 Szent-Györgi studied a strong reducing substance which occurred in the adrenal cortex, in cabbages and oranges. He named this substance "hexuronic acid", and in 1932 it was found that it protected against scurvy. In 1932 Waugh and King showed that vitamin C, isolated from lemons, was identical with "hexuronic acid". In 1933 Haworth and Reichstein synthesized the vitamin C independently and renamed it "ascorbic acid".

Other fruits and vegetables contain vitamin C, among which is the English black currant. The high vitamin C content of this fruit was first demonstrated by Olliver, who found that it contained on an average two milligrams of ascorbic acid per one hundred grams, and thus was three or four times more potent than orange juice which averages only fifty to sixty milligrams per one hundred grams. In some respects the orange is better than the black currant, particularly in infant feeding, but in view of the fact that few oranges or lemons are now imported into Britain, the black currant, may, to a limited extent, take its place. The existing crop of black currants, unfortunately, can provide but a small proportion of the quantity needed, but the knowledge of the antiscorbutic properties of the black currant should result in more bushes being planted. In the meantime, search should be continued for other vegetables or fruits which contain vitamin C, as it is valuable in these times for adults and children alike.

Further investigation of the vitamins will yield yet more knowledge valuable to the human race.

Health Standards in Palestine

Hadassah, the Women's Zionist Organization of America, has presented a report surveying one phase of its wartime program for the children of Palestine. This report shows that the organization has almost tripled its activities since war began. In 1921 Hadassah supported one child welfare station; today it has forty-eight in operation. The number of children treated has risen from 486 in 1922, to 6,165 in 1941. The total number of cases admitted since 1921 in Hadassah health welfare stations was 68,430 expectant mothers, 80,274 infants and 51,581 pre-school children. Home visits numbering 1,075,465 have been made by Hadassah physicians and nurses between 1922 and 1941. Some sixty thousand births, seventy percent of them in Hadassah hospitals, have also been supervised by the organization. This work was done in addition to the school hygiene program which cares for seventy-five thousand children annually through periodic eye examinations and general physical checkup. The percentage of active trachoma found among school children in 1918-1919 was thirty-four percent. In the winter of 1941 this had dropped to 2.5 percent.

Avoid RECURRENCE in PSORIASIS

The most effective means of preventing recurrence of the ugly patches of psoriasis is to continue treatment until the last lesion has been cleared away. A few small neglected areas may serve as the basis for a return of the disease.

Every patient with psoriasis deserves RIASOL for *faster, safer* and *more complete* disappearance of the disfiguring patches. He equally deserves that treatment be continued until the last vestige has been removed, so as to minimize the danger of a setback.

RIASOL is the distinctive formula containing 0.45% mercury chemically combined with soaps, 0.5% phenol and 0.75% cresol in an oily emulsified liquid. It is non-staining, easy to apply and requires no bandages.

For best results, Riasol should be applied once daily, preferably before retiring, after bathing and thoroughly drying the skin.

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One hospital ship, which must remain unnamed, had a remarkable record. She was at Pearl Harbor when the Japs struck and hundreds of the wounded were treated aboard her. During an extended period beginning with the Solomon Islands offensive in August 1942, this floating hospital cared for 4039 patients—men wounded by machine gun bullets, shell fragments; men terribly burned, lacerated. Many fell on Guadalcanal, others in sea engagements and aerial combat. Among these 4039 cases, only seven deaths occurred—a mortality rate of 0.18 percent.

Folk-lore of Smallpox

In an address on the folk-lore of acute exanthemata, delivered at a meeting of the Section of the History of Medicine of the Royal Society of Medicine, Dr. J. D. Rolleston said that the amount of folk-lore connected with each exanthem was in direct relation to the antiquity and importance of the disease, so that in this respect smallpox, measles, scarlet fever, and chicken-pox were represented in the order named. With regard to causation, there did not appear to be any popular causes suggested for their occurrence, and, with the exception of smallpox, none of them had been assigned a Divine origin. In accordance with medical folk-lore generally, prophylaxis was rarely employed in the acute exanthemata except smallpox.

With regard to the causation of smallpox, Sir James Frazer and others gave numerous examples of outbreaks of smallpox in different parts of the world being attributed to a goddess or, much more rarely, to a god, and of the various means employed to win their favor or prevent their visitation. Examples were given, too, of the avoidance of calling the deity and the disease by their proper name, and of using instead some more or less euphemistic words or phrases. The supposed transfer of smallpox to animals, plants, and inanimate objects in accordance with folk-lore practice in other diseases was also described. Prophylaxis of smallpox by inoculation was a folk-lore method carried out by old women in Turkey long before it was adopted by the medical profession in England and France. Besides overheating the patient, the folk-lore treatment of smallpox consisted mainly of animal and plant remedies and the invocation of patron saints.

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Our Contributors

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* * *

Anthony Bassler, M.D., F.A.C.P., LL.D., New York, N. Y., was graduated from the last class of the Bellevue Hospital Medical College in 1898. After his internships, he engaged in general practice for about ten years and then limited his practice to internal medicine, mostly in the field of digestive diseases. He is consulting gastroenterologist to fifteen hospitals in and about New York City. His textbooks on digestive diseases are well known and he has published many monographs on diseases of the alimentary tract. He is a member of numerous national organizations and honorary member of the Belgium, Italian, Argentine and French Gastroenterological Associations. For his work in Army dysentery in the World War, he was honored by many governments.

* * *

Lowell Sinn Selling, M.D., Ph.D., Dr.P.H., Detroit, Mich., attended the University of Michigan, 1918-1924. From 1928-1930 he was an intern and resident in psychiatry in the Bellevue Psychopathic Department, and from 1930-1934 he was research psychiatrist at the Institute for Juvenile Research in Chicago, which included acting as psychiatrist to the State School for Boys and Girls, and psychiatrist at Joliet Penitentiary. He was formerly an instructor in physiology at the University of California, in psychiatry at University and Bellevue Hospital Medical College; assistant professor of criminology and mental hygiene at the University of Illinois, and lecturer in psychology at Wayne University. He is now director of the Psychopathic Clinic, Recorder's Court, Detroit, Mich. He belongs to numerous professional societies, and has contributed many articles to the literature of his specialty.

* * *

Frederick J. Farnell, M.D., F.A.C.P., New York, N. Y., practices neurology and psychiatry. He is clinical professor of psychiatry at the New York Medical College, assistant in psychiatry at Flower and Fifth Avenue Hospital and visiting neuropsychiatrist at the Metropolitan Hospital, Welfare Island. His medical interests are in diseases of the brain, organic and or functional, and the chemicotherapeutic approach to nervous and mental disorders. In 1931 he became a member of the Advisory Council of the National Committee on Prisons and Prison Labor and as such has been active in the problem of prison rationale and integration, especially in relation to vocational and avocational rehabilitation, and standardization of the psychobiological approach to conduct disorders. Sex inversions and aggressions, alcohol, drug addictions, etc., are envisioned as important future studies.

(Continued on page 402)

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Eugene Davidoff, M.D., Craig Colony, Sonyea, N. Y., was graduated from the University of Iowa College of Medicine in 1927. He was formerly assistant professor of psychiatry at Syracuse University College of Medicine and senior clinical psychiatrist at the Syracuse Psychopathic Hospital, Syracuse, N. Y., clinical director at Willard State Hospital, Willard, N. Y., and is now clinical director at Craig Colony, Sonyea, N. Y. He is a Fellow of the American Psychiatric Association and a Diplomate in psychiatry of the American Board of Psychiatry and Neurology. He is the author of approximately forty articles on the subject of psychiatry.

* * *

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* * *

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* * *

Samuel Kahn, M.D., Ph.D., New York, N. Y., received his degree in medicine from Emory University School of Medicine, Atlanta, Ga., in 1921, and New York University in 1923. He was chief psychiatrist of the Induction Board of the states of New Jersey and Delaware until March 1942.

* * *

Milton H. Morris, M.D., Far Rockaway, N. Y., was graduated from Long Island College of Medicine, Brooklyn, N. Y., in 1921. At present he is director of the department of medicine of St. Joseph's Hospital, Far Rockaway. His hobby is fresh water fishing.

Care of the Aged

A conference sponsored by the Welfare Council of New York City was held on June 17th to discuss the necessity of developing a more adequate community program for the care of the five hundred thousand aged persons in New York.

The principal feature of the conference was a report of the study made recently of the problems of New York's aged in relation to present facilities for their care. It was stated that during the past decade there had been a fifty-seven percent increase in the number of persons over the age of sixty-five in New York City, and neither private nor community resources had kept pace with this rise. It was also pointed out that it was necessary to get away from the tendency to regard all persons over sixty-five as incompetent and incapable of productive contributions to their own care and society in general. There must be a keener realization of the individual differences and distinctive potentialities of these older persons.

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A CONSIDERATION OF CERTAIN PSYCHOLOGICAL FACTORS IN THE WARTIME NUTRITIONAL PROGRAM*

LOWELL S. SELLING
Detroit, Mich.

With the bombardment of our population with facts about nutrition to the end that we may be a better nourished nation, certain psychological problems arise. It is only natural that since lifetime habits of such importance as eating are subject to change in wartime, the methods of changing them should be a matter of some concern to the powers-that-be. While some psychological techniques undoubtedly have been utilized in preparing posters, making announcements and preparing educational literature, the use of psychology in solving the nutritional problems of the nation in wartime has, I am afraid, been neglected.

Perhaps sleep is physiologically more important than eating because humans spend more time sleeping, yet eating is the most important function of our daily lives from the viewpoints of pleasure and efficiency. Psychologists have spent no time studying the problems of food preparation, kitchen administration, and dietetics as they apply to psychology, and yet psychological and psychiatric research should be able to solve many of the problems which arise in trying to feed a population properly. Nutrition and psychology are closely related and this relationship can easily be seen. It is a special province of the psychologist to find out, for example, why one man rejects vegetables while another rejoices in them, or why the housewife can eat hearty meals when she goes out but cannot enjoy her own cooking. These food preferences are primarily psychological and differ from the specific medical problems of allergy, of food sensitivity, of individual differences of indigestion which are primarily physiological in nature.

Importance of Psychological Factors

The importance of careful preparation and selection of food is impressed upon the prison psychiatrist because almost all prison riots begin with complaints about food. The food itself is not the only reason for such riots, but when the atmosphere in a corrective institution becomes tense for other reasons, one bad meal is sufficient to bring about a serious, violent situation.

In the realm of the noninsane, noncriminal mind, too, to the psychologist nutrition looms as having important scientific angles. I am sure that few nutritionists have any concept of how many marriages are wrecked because of poorly prepared food, food incompatibilities between the two partners in the marriage, or inadequate nutrition.

Children, too, become problems because of the food situation in the home. Not only are children's likes and dislikes, symptoms most often stressed in children's eating problems, important, but also the attitude that the parent takes toward feeding the child. A child's lifelong attitude toward his parents has been warped by the fact that he has been forced to eat something that he did not like. A mother who is adept at entertaining and giving children food that they enjoy may be able to tie her children to her emotionally in a tight but wholesome fashion, whereas another mother, who cannot keep her children at home and cannot entertain them and feed them in a pleasant and adequate manner, loses her emotional contact with them and finds herself trying to handle problem children.

While the nutritionist—and I here include the family meal planner—has a number of problems to solve, psychologists too have special problems in the field of nutrition.

The psychologist is interested, among other facts of the problem, in determining the effect of likes and dislikes on nutrition. I have recently completed a study of this very subject, using the patients who come through our psychiatric clinic as subjects, controlled by other individuals of the community to whom I can give questionnaires and obtain information with regard to their eating predilections. I have been particularly interested in finding out, to begin with, what particular foods were universally disliked, if any; also what sort of person disliked a particular article of diet. I was interested to observe early in the study, that spinach was not the universally disliked food it is alleged to be, although many mature men did dislike it; and those who were familiar with it in the creamed form or in some other form than the usual boiled leaves were more apt to like it than those who had experienced only the last type of preparation.

Among a hundred and two everyday persons whom I interviewed, I found that among men (sixty-seven cases) meat was universally liked, and among women (thirty-five cases), although meat was definitely in favor, creamed cheese and canned fruit were higher on the list. These findings suggest that the general liking for meat is partly an inherent one, for we humans are presum-

*From the Psychopathic Clinic of the Recorder's Court, Detroit, Series PD No. 4.

ably carnivorous animals, as indicated, in part, by the fact that we have sharp canine teeth, and the type of intestinal tract which meat-eating animals usually have —a situation which suggests complications in any national meat rationing program.

Why so many of the women in my group had a predilection for cheese and sliced pineapple, canned peaches, and other articles of similar ilk is more difficult to explain except perhaps that they are easier to prepare and the woman who is alone does not want to take a great deal of time in preparing her own food.

What is more important than the mere presence of likes and dislikes is the effect of likes and dislikes upon the general nutrition of a person being studied. Dealing with individual cases in the clinic, we were able to find among them a number who, because of food fads, were starved for certain vitamins or certain articles of diet. Particularly, there was observed a lack of vitamin A and vitamin B_1, yet there was no particular individual lack of butter usage in the A deficient cases according to their diet history. This finding would suggest that we do not have the whole answer to the vitamin A deficiency problem in lack of A-carriers. The great fruitfulness of some of our cases, too, is a contradiction of the fact that they showed a low vitamin E intake in reporting their food habits. I cannot quite reconcile the fact that these people who have so many relatively healthy children reported a low vitamin E intake, while those who are better able to afford food which carries vitamin E, and did claim to eat it, had smaller families. I believe, however, that this discrepancy can be interpreted through social factors, such as the use of contraceptives, fatigue due to too much social activity, and, perhaps, to the psychiatric trait, narcissism.

Morale and Feeding

Another study which we have made is on the effect of feeding on hospital morale. The word "morale" has been much used recently to indicate a favorable state of mind in groups or in the community from which an army comes. However, the use in psychiatry of the word "morale" is not new. For many years psychiatrists have been aware of the fact that certain features of the environment of insane patients affected their mental conditions, improving or depressing them. Music, color, environment, entertainment all have been studied, but food has been somewhat neglected. One reason for this has been that the hospital superintendent has been too busy with other interests. He has had to give his patients suffering from paresis treatment with malaria, he supervises insulin and other shock therapy; he takes care of budgets and supervises purchasing as well as roof repairs, leaving little time for a routine such as feeding which can be delegated to others.

The mental hospital superintendent has been willing to turn over the problem of food distribution to a steward, who often is not properly trained in either nutrition or dietetics. Sometimes this employee is merely a purchasing agent, who, because he can buy a certain article of food and buy it cheaply, will distribute it through the hospital, even though the patients might be unwilling to eat it and might even become starved because of the large quantities of the disliked food served to them and rejected by them.

Often a mental patient is a finicky eater. Very often he requires not only carefully prepared food but food that he is interested in, and food with which he is familiar. An insane or mentally sick woman is usually an even more finicky eater than a mentally sick man. She often demands very dainty food which only too frequently is not possible in a mental hospital budget. Sometimes she has a food perversion, wherein she wants articles of diet which are difficult to obtain, or that must be prepared in a bizarre manner, or even articles such as chalk which are not even considered human food.

In line with this problem of morale, the relation of psychodietetics to army morale cannot be ignored in these days. While we read a great deal in the newspapers about how good army food is, and how well the men claim it is prepared, behind the problem of giving the army not only carefully prepared food but adequate amounts for physiological satisfaction, lies the psychological principle of creating a satisfied army and one which will serve quite amiably. The question of what foods to give military and naval personnel and how best to nourish them is an intricate one. Food which is highly nutritious has been found to conflict with the habit patterns or eating interests of the soldier, and he may refuse to eat the food which is best for him. On the other hand, he may desire foods which are not good for him and if he does not get them, will feel that he is abused and will react unfavorably. In the early days of a campaign when food is plentiful, armies become sluggish because they continually have a full stomach, so that, even though overfeeding may produce contentment and may stop the soldier from complaining and grumbling and disturbing his family at home, it may not produce a fighting army.

The frequently underfed armies of Napoleon and relatively recently some stories of isolated Russian and German troops, exemplify the fact that the martial spirit can be set up in individuals even when they are not too well fed. However, we must admit that German experts on morale—and I do feel there is evidence that excellent scientists have been dealing with this problem-recognize the fact that the army must be well fed, that their food should be better than that of the civilians. However, in this respect Hitler is taking a chance, because if the civilian morale cracks because of starvation and lack of adequate food, the reactiveness and irritability of the civilian population will eventually be transmitted to the army. This happened to the German army in the last war, resulting in complete failure of the fighting force—in fact the economic warfare branches of the United Nations are counting on this eventually.

An experiment in nutrition was tried in the German Army which is interesting from a psychological point of view. During the march through France and Belgium the men were given an eight-day ration in a package not larger than the palm of their hand. An officer in the chemical warfare division of our own army tells me that they were also given pills to stimulate them and make them feel more like fighting. He was not in a position to give me any further information so I cannot expatiate on this subject. Nevertheless, these men did fight for eight days on a balanced ration of very small quantities—that had no bulk, had no power to satisfy. What the results of this type of rationing had on the German Army morale I do not know, but it will be

interesting to find out when we can. In our army the C, K, and other emergency rations are of small size and easily portable, and it is to be hoped that nutritionists can make a psychological study of our troops' reaction to them. Far more important than their effects on the bodies of the soldiers, which may not be important at all because of the fact that the ration is well balanced with vitamins, mineral content, fats, protein, carbohydrates, and other elements of diet, might be the lack of bulk, setting up psychological factors which cannot be ignored, for the soldiers seem to get the reaction that they did not really feel satisfied even though their bodies might get all that they actually required from a nutritional viewpoint.

With the impact of rationing upon the country the reaction of the civilian population becomes important. Our experience with institutional problems in prisons, hospitals, and in the armed services, as described in the preceding paragraph, gives a little idea of what emotional reactions to expect as food choices become more and more restricted. Those persons who live by themselves will have major reactions to the rationing situation because the quantities allotted to them singly, although not less than those allotted to single members of families, would appear to be small. They will feel that they are restricted greatly because of the non-eye-filling amounts that they can purchase when keeping within rationing allowances; yet these small amounts are physiologically adequate. Many unfavorable psychological reactions will come from small families, particularly in the laboring groups, who, though impressed with the fairness of the rationing plan, will soon learn that those living in hotels and expensive boarding houses will be able to get food which *appears* to be both qualitatively and quantitatively better.

Socalled "black market" activities offer a great threat, not only to the health of the illicit customers but to their psychological adjustment. Some will become law violators, some will even become antisocial people, and lifetime habits of social adjustment will in some cases be broken down by the guilt feelings that these activities engender. There are many motives that the psychologist can look into in "black market" activities, both in evaluating the greedy, grasping attitude of some dealers and the whole system of bribery and corruption which can arise and which can make the activities of the "black market" comparable to the antisocial activities of the bootleggers of the twenties.

The motivation of "black market" customers, too, offers an interesting series of problems. Some are willing to sacrifice anything in order to feed their children well and it requires a great deal of community and individual nutritional education to convince many parents who have known only plenty that the amounts allotted by a thoughtful government, even though they appear small, are adequate for the proper physical and mental growth of the child. The complaint made by children on rations that they are hungry, particularly their desire for sweets, has been a heartrending psychological problem in the occupied countries and even in England, and, if such emotional problems can be prevented in this country by judicious administration, it will go a long way toward stopping illicit activities.

Naturally, there are egocentric and unstable individuals who are unable to face even the small sacrifices demanded of a civilian population such as ours. The imminence of warfare is not great enough to make them feel the cohesive and cooperative social spirit which operates in Britain. Individual reactions will still count for a great deal in making those who do not easily fall into the rationing pattern ripe subjects for criminalistic activities.

The psychological problems of hoarding deserves consideration. They are largely a reflection of the unpredictableness of the war, drought, famine, or depression. Persons who are sure of their personal predictions of the time of duration of any of these acts of God, whether the prediction be made on statistics, history, hunches, or the readings of an astrologer, are less prone to hoard than those who are not sure of themselves, nor of the government, and generally in a state of emotional flux. A long-range, well thought-out basic program rather than a piecemeal one can do much to prevent hoarding, because it lends security to the unsure.

Too, there is the competitive tradition of our country, one which has its basis in the desire for superiority in all human beings which works to make each individual desire to get as much for himself as possible. Too little social cooperation has been demanded of Americans in the past. In fact, we have been inspired to try to rise to the top of the economic or social heap, to make more money than the other fellow, to have a nicer car than he, and consequently, when we thought in terms of life needs, we thought in terms of having more food and more clothing during difficult times than our neighbors.

Psychological reeducation as to the nature of foods to be used comes about gradually and naturally and is one of the least of the psychological problems. It will not take long for even an inadequate housewife to learn to buy fresh foods if she cannot buy the canned foods which had in the past offered the means of preparing a meal with a minimum of effort.

Domestic Conflict and Food

The question of what individual differences must be taken into account in producing a well fed population offers an important problem. It has been my experience in looking over most books on nutrition that human beings are dealt with as having no personal differences, for individual likes and dislikes are not stressed. But I do find that individual likes and dislikes are a major source of problems to the homemaker or the institutional manager.

The sources and factors which the homemaker or dietitian must consider in dealing with individual differences which are important in the home or institutional manager come from differences in economic background, esthetic training, educational conflict, national or regional, religion, age differences, differences in childhood training.

It is surprising how frequently we find, even in our own country, the influence of foreign background. While it is true that the influence of socalled foreign cooking dies out in the first American-born generation, nevertheless the children of immigrant parents have a predilection for or rejection of the food eaten by their parents depending on their emotional integration with them. Not infrequently an American of Scandinavian descent will make it a point to have one or two dishes typical of his forebears' country, either to please his

parents or because he himself, because of his accustomedness to the food, likes it. Where there is cultural conflict in the home, the children become "Americanized" and reject the food of their ancestors. A child who has spent some time away from home and has eaten the common American diet of the region where he might be, often returns home to reject his parents because he thinks that they are inferior in their behavior and ideas to typical Americans, and his rejection expresses itself in rejection of the Old World food preparation.

Some commentators on food are inclined to think of race as being important. I think that probably racial differences are extremely small and are really cultural differences. The Mexican Indian who likes his tortillas is no different in his eating tendencies than the white man from the same region, and those with Indian blood in the northern United States do not favor the food eaten by the Mexican Indian.

Nevertheless, the negro who comes from the South is interested in his "chitlins" and other special articles of diet, and in catering to negroes and whites in the same institution one has to bear such differences in diet in mind. There are, too, regional differences in the United States, as indicated by such books as *The United States Regional Cook Book,* a number of creole cook books, a *Yankee Cook Book,* and others. The typical Vermonter likes his bland New England boiled dinner, while the Louisianian from New Orleans is interested in highly flavored and highly seasoned articles of diet, often including sea food not found in the North, so that when marriage between representatives of these groups takes place, conflict often arises from divergent food interests, although there are usually more psychological factors involved.

Childhood training is of great importance. Many children learn, by seeing the food about them, to decide what they like to eat. They prefer the articles of diet that have been customary at home. The establishment of food habits arises chiefly by imitation. A well-trained child, it must be noted, becomes so hungry that he eats everything that is served, and develops either universality of eating interests or at least a tolerance toward all the foods that have been served in his home.

Problems of Food Preparation

Some problems of food preparation and divergent interests in food sometimes come from the complexities of preparation. The working girl who comes home and has to cook a meal for herself and her husband in half an hour must use relatively simple menus and must have adequate equipment. With the limitation of canned goods and ready-prepared foods due to shortages of material in wartime, working women and working men living by themselves are definitely handicapped in selecting and preparing adequate foods. Too often in small apartments, where working women live, equipment for proper food preparation is not present. She may not be able to serve her husband the type of thick juicy steaks he likes. She cannot bake pies.

The problems of food preparation in peacetime and in wartime diverge from each other primarily in new homes or in families who have moved to new locations. In older homes the kitchens are well stocked with equipment and the possibilities in preparing food and catering to psychological differences are modified only by the equipment already at hand and the need for repairs and replacements. On the other hand, the bride or the newly moved family finds the shortage of electrical equipment, such as toasters, and the difficulty of obtaining supplies for use in canning, and the lack of metal ware for essential pots and pans—even kitchen knives, forks, and spoons—which results from turning kitchen equipment factories into war plants, an important limiting factor.

In the same sense, so far as possible within the limitations of the facilities and the money available, quirks of abnormal minds should be catered to. We must recognize, however, that in the majority of institution inmates, particularly in institutions for the feebleminded, for the impoverished, and for orphans, the food tastes are not critically abnormal and need not be given too great consideration. Food needs only to be palatable, varied, pleasant, and of sufficient quantity.

Problems in the psychology of food preparation can be of two different classes. One deals with the adult. The second class concerns children, and I shall mention only an extremely important one to give an example. Children's feeding habits have a great deal to do with the emotional adjustments of their parents. Feeding of children, encouraging them to eat, and the giving to them of a properly balanced diet, is extremely important and has been receiving a good deal of attention by child psychologists. It must not be forgotten, however, that a spoiled child or the problem child may develop food fads about eating habits which will be a problem to him all the rest of his life. Only too often children are forced to eat when they are not well, when they do not have the right emotional attitude, because they are tired or because of some other reason which sets up a dislike for an article of diet which has nothing to do with the child's basic habit pattern.

Management of Psychonutritional Inadequacy

I have pointed out a few of the problems which exist in this dietary situation and some of the features that the psychologist can recognize. The question then would be asked: Can these problems be solved in an easy manner? The answer is "yes" if one considers the major limitations in solving these problems, which are: first, the educability and adjustability of the person who is to plan and prepare the food; second, the economic problem; third, balance of a family's diet, when there is an individual with food fads in the group.

There are some people who are really unable to prepare food. Among these are the feebleminded. The lower grades do not have sufficient intellectual endowment so that it is safe for them to turn on a gas stove, and they cannot boil water without scalding themselves. They cannot be trusted to follow a recipe and produce palatable food. However, as we approach a higher level of intelligence, the danger of allowing mild mental defectives to cook disappears somewhat and as they become educable to a minor degree, to the third or fourth grade, it is possible to produce recipes that they can follow.

In addition to those who are congenitally uneducable there are others who cannot be trained to be cooks or nutritionists because of some emotional complex. To illustrate this we will cite a case where a woman's inability to cook caused conflict in the family resulting in complete incompatibility.

(*To be continued*)

Symposium on Neuropsychiatry

SOME PSYCHIATRIC ASPECTS OF ABORTION PROBLEMS*

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Psychiatry tells us little about the relation of abortion to mental diseases. A schizophrenia or a manic-depressive psychosis following an abortion is purely coincidental. Nor is the infective, exhaustive psychosis which may follow it in any way different from the psychosis in general. Psychiatrists have always held that abortion should be resorted to in cases where a psychosis is likely to supervene pregnancy or childbirth. There is, therefore, little that I can say about the purely psychiatric aspects of abortion. My title, though not a misnomer, is thus, not quite appropriate to the remarks that I am going to make. Indeed, when Dr. Folsome invited me to speak to you, this was suggested as a tentative title, and when I began to think about my presentation, it occurred to me that my paper might be called, "Reflections of a Psychiatrist on the Problem of Abortion."

My own experiences with this problem, during forty years of psychiatric practice, have been insignificant if I compare them with all the other strange problems that came to my attention. On but few occasions have I been called upon to give an opinion on the interruption of pregancy in married women. With one exception it concerned women whom I had known and previously had advised to have no children. They were all subject to manic-depressive attacks, and I was more than reasonably sure that a pregnancy or childbirth would be followed by an exacerbation of the psychosis. In such cases I was asked, usually by the family physician or the obstetrician, to send him a letter stating that the patient's future welfare demanded that the pregnancy should be interrupted. Once, such a patient came to me in a state of excitement and said that her obstetrician who had "taken care of her before", was now somewhat evasive and asked her to discuss the situation with me. The physician then informed me that his attitude was due to the fact that he was not quite positive of the legitimacy of this pregnancy. As this patient suffered from periodic manic-depressive attacks, and if the doctor's suspicions were justified, the illegitimate pregnancy must have occurred during the recent manic period. I maintained that the pregnancy should be terminated.

This particular case happened over a generation ago, soon after I became convinced that any woman who does not wish to have a child should not be forced to have one. Many observations taught me that such married women are either neurotic or psychotic, and that a child thus born will in all probability not be any asset to society. Pragmatically speaking, I am still of the same opinion, although I am now convinced that women—even those who clamor for abortions—really wish to bear a child. Once only was I confronted with an abortion in a single woman, and as this gave me no small amount of worry and caused me to transvaluate all my valuations of this problem, I will cite the case:

It concerned Mary, a young woman of twenty, a sophomore in college, who was first brought for treatment by her mother at the age of eleven years. The girl was always more or less neurotic and for about a year before I saw her, she committed acts which were diagnosed as kleptomania. I soon found that this hysterical girl committed these acts during crepuscular states, which lasted from a few hours to a few days. I succeeded in curing her of this malady and she then made a good adjustment to life. Following her discharge, while attending school, and then college, she visited me a few times every year when she happened to be in New York. After her mother died, her father came to see me for the first time and told me that one of the last wishes of his wife was that I should continue my interest in Mary and see her from time to time.

This pleasant relationship continued until she came to my office one morning, crying, and informed me that she was pregnant. She insisted, however, that she did not know how it happened. Knowing that she had always told me the truth, and recalling her former tendencies to amnesia, I believed her. Investigation then showed that about two months before, she was taken home from a college dance in the early morning hours by a young man with whom she had had a few drinks. These were the only details she could remember. But when she failed to menstruate, on two successive periods, her roommate took her to a physician, who verified a two months' pregnancy.

As one might expect, the girl was hysterical and threatened suicide. She became quite excited when I told her that nothing could be done without her father's coöperation. I telephoned to her father, who came to my office from a nearby city within a few hours. After a long deliberation we decided that the only thing to do was to stop the pregnancy. There was no other apparent solution.

From all that I had hitherto heard about the ease with which abortions were performed, the task before us seemed quite simple. However, as I considered this young woman as a member of my family, I could not think of looking for an abortionist. I visited instead a friendly gynecologist, told him the story and impressed him with my interest in this patient. As friendly as he was towards me, he hesitated about taking the case; he said he would think it over. Feeling that I should not urge him to do something against his ethical convictions, I called on two other obstetricians, with the same result. They all, however, flirted with the idea,

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because I frankly told them that the girl belonged to a distinguished and well-to-do family. In discussing the case with them, they all agreed that socially and psychically Mary's life would be ruined if she should be forced to have the child; yet, they feared lest they should endanger their professional existence. After spending a whole morning in this futile quest, I returned very dispirited and told the anxious father about my unsuccessful mission. As I spoke, he reflected, and then said, "What about our family physician, old Dr. X., who brought Mary into the world? He is absolutely trustworthy and I feel that he would help us." We soon got him on the long distance telephone and when he said to her father, "Bring her home; I'll take care of her", I was greatly relieved.

This was the first time that I was brought face to face with the problem of induced abortion. Hitherto, I entertained the popular resentment against abortionists, but before the good family doctor was conjured up, I wished sincerely that I knew a reliable abortionist.

When we read the literature on the subject of abortion or hear discussions at private gatherings, almost everybody seems to agree that under certain social, economic, or psychic conditions some abortions are justified. In medical circles the abortion problem has never been solved. Whenever the subject is broached, there is much talk, much evasion, but as physicians have an ambivalent feeling about it, they express themselves accordingly. Those few who feel broadminded about it lack the courage to speak. Nor is there any unanimity about the causes of abortion. Most investigators seem to think that it is a phenomenon of modern times and feel that it would vanish if our social and economic conditions were improved. Yet, as a matter of fact, abortions have been practised at all times, among all races, and in all parts of the world. The causes and methods of abortion among the Fijians or the New Guineans differ slightly from those of the Europeans, but fundamentally they are the same. To be sure, some have stressed the fact that criminal abortions have been increasing continuously despite the severe punishments that have been meted out to them since ancient times. One may, nonetheless, question whether there really is such an increase.

Aside from the religious objections to abortion, the main argument against it is that it causes a decrease in population. It was for this reason that as early as in 16 A.D. Augustus Cæsar had promulgated the socalled *Julian Law,* which offered rewards for child production and punishment for celibacy. Nowadays, the totalitarians for somewhat different reasons are not only against abortions, but actually enforce child production.

In taking histories of married patients who have only one or two children, or none at all, I have always asked the reasons for a limited size family. The most common answer is: "I cannot afford to have any at present", or "Two is all we can stand on our present earnings". Most of my informants used contraceptives, and when "caught", went through abortions. Some of those who were nearing middle age confessed to four and, sometimes, five abortions. What I found concerning the ubiquity and frequency of abortions seems to have existed since antiquity. About thirty years ago, the New York *Medical Record* estimated that there were about eighty thousand abortions annually in New York City, of which only about one percent came to the knowledge of the authorities, and in Chicago from six to ten thousand annually, among which seventy-five to ninety percent occurred in married women. But, everybody agrees that it is really impossible to obtain correct data on this problem. I was interested naturally to hear this confirmed by the two preceding papers, read here this morning. It seems that the nature of the situation is such that the only thing one can say is that criminal abortions have always been practised with great frequency in all ages and in all strata of society.

Those who try to fix the responsibility for the abortion attribute it invariably to the woman. Long ago, the Roman poet, Ovid, sang: "Ah, women why will you thrust and pierce with instruments, and give dire poison to your children yet unborn? . . . "Th.s neither the tigress has done in jungles of Armenia, nor has the lioness had the heart to destroy her unborn young; yet, tender woman does it—but not unpunished; oft she who slays her own in her bosom dies herself. She dies herself, and is borne to the pyre with hair unloosened, and all who behold cry out: 'Tis her desert" (1).

But my own records show that it was not always the woman who was most desirous of stopping the pregnancy. In the case of married women the husband was usually as responsible for the abortion as the wife. It is only natural that the single woman should not wish to bear a child out of wedlock, but, there, too, one finds exceptions. I recall two cases:

During one of my visits to the Bedford Reformatory for Wayward Girls, I became interested in one of the inmates, a young woman of twenty-two. It was a case of seduction and abandonment. When the girl was in the seventh month of pregnancy and unable to obtain a position as a maid, she appeared voluntarily before a judge, who after hearing her story committed her to the institution. This girl told me that she had been advised to have an abortion, but after considerable reflection, decided against it. I was attracted to her very beautiful baby and asked her whether she would not wish to give it away for adoption. I was looking for just such a child for a fine childless family. I urged her to give up the child and pointed out the struggle ahead of her and her child, but her maternal instinct was such that she could not make this decision.

The second case was that of a well educated young woman of about twenty-eight years, who shortly before she was to marry discovered that her fiancé had a wife in another country. She refused then to marry him and although he urged her that under the circumstances she should go through an abortion, she refused to do so. With no help she had managed to bear the child and support it later. These women braved the hardships and contempt of the world rather than forego their instinctive maternal fulfillments. The second of the two finally consented to give up her eight months old child for adoption, but she continued to write to me for many years, offering to take the child back if the foster parents were willing.

I said before that I have had little experience with actual abortions, although naturally I have studied many women who underwent criminal abortions prior to their approaching me. In some women the abortion seemed to act as the *agent provocateur* for the psy-

choneurosis, or it aggravated an existent neurosis. I do not claim, however, that an abortion, as such, is responsible for a neurosis or psychosis. The average woman seems to go through it without evincing any untoward mental sequelæ, although intensive studies reveal that abortions invariably leave a psychic scar, which one can easily find. Thus, Mary, mentioned above, had to return to me for about two months' treatment following her abortion. As I had treated her psychoanalytically before the operation, I could easily evaluate the extent of the trauma left by it. It would be impossible to enter here into details and I shall mention but a single important fact. To my great surprise I found that Mary, who begged so hysterically for an abortion, really did not wish to have the pregnancy interrupted. In other words, *consciously she feared the wrath of the outer world,* and consequently, wanted her pregnancy stopped, but *unconsciously she wished to bear the child.* Before coming to me, she tried multiple means to stop it; she resorted to drugs and violent exercise, but with no avail.

As all the postabortion cases that I have studied showed the same thing, I became convinced long ago that no woman wishes really to interrupt her pregnancy. The psychoid of the uterus, animal or human, struggles violently against it. I am informed by veterinarians that nothing short of violence to almost certain death can cause abortions in our domesticated dogs. Ovid aptly said that the tigress and the lioness have no hearts to destroy their unborn young; like so many who interpret everything anthropomorphically, he ignored the purely instinctive animal psyche. He could have said the same of the human mother. The destruction of her unborn human baby is not done by the mother, but by the cruel and violent forces of so-called civilization. Left to herself no woman would think of having an abortion.

I have studied many pregnant women and I feel that feminine nature is at its best during pregnancy and child-bearing. Maternity, to cull an expression from poetry, is sublime, but to understand it, one has to resort to paleopsychology. The peculiarities and vagaries so frequently encountered during that period of feminine life cannot be explained on a conscious individual basis. To illustrate some of the struggles of maternity that can be constantly seen by one who takes the time to investigate, I will cite the following case:

When Mrs. P. came to my office one morning in 1934, she said: "I don't know whether I should call myself a patient. I am not sick. I wish only to tell you my story, and ask a question." She proceeded to relate that she was brought up in a poor, but respectable home. She had obtained only a high school education and would have liked to have gone to college; still it could not be done. She had to go to work. She spoke then about John, who played a big part in her life. He was brought up in the same block; they had always been attached to each other and were frank lovers since adolescence. John did, however, go to college, and with her encouragement and financial help he finally became a lawyer and obtained a position in a well known law office. They were ardent lovers for years and expected to marry as soon as his earnings would warrant it. However, he gave her up suddenly and married the daughter of the senior member of his firm. She was convinced, however, that John really never loved his wife; *she* fell in love with him and he, having always been poor, and highly ambitious, was carried away by the situation. Mrs. P. stated that when John foresook her, she had been on the verge of committing suicide, but was kept alive by a feeling of revenge. When she gradually calmed down, she continually watched John's married career, concerning which mutual friends kept her informed. She heard soon that although he prospered as a lawyer, his married life did not run smoothly. This gave her some solace and added force to her conviction that John was still in love with her. This feeling and her lack of faith in the whole male sex kept her from marrying although she had many suitors. When she was twenty-eight, however, a new suitor appeared on the scene, and as his name was the same as that of her former lover, she decided to marry him. She did not love him and married him solely because she could thus realize her thwarted wish to be Mrs. P.

Because she felt no love for her husband despite the fact that he was very much in love with her, she did not wish to have any children. For religious reasons no precautions were taken; yet, for years she did not conceive. She was sure that she controlled this entirely by her will. After three years of an uneventful married life, she heard that her former financé, John, had died suddenly. After brooding over it for a while, she decided to have a child, and in due time gave birth to a boy, whom she called John. As her strong wish to have John P. was thus realized fully, she wished to have no more children, and for a number of years before consulting me there was no pregnancy despite the fact that she took no precautions whatever. On two occasions she thought that she was "caught", but her fears proved groundless.

What prompted her to consult me was the fact that her boy, John, who was now about five years old, looked "the image of her dead lover". She assured me that she was not the only one who was struck by this resemblance. A close friend who was fully acquainted with her whole past was of the same opinion. She was puzzled; yet, pleased by this peculiar phenomenon, she called on me primarily to find an explanation for it. Her friend, who was somewhat mystical, spoke of transmigration of souls, but Mrs. P., who was of the matter-of-fact type of personality, decided to seek an explanation from a psychiatrist. The solution was not as difficult as it seemed at first sight.

I found soon that besides the likeness of names there was also some physical resemblance between her husband and her former financé, a fact which she had not noticed consciously before consulting me. Moreover, we know from Freud that when a person is forced to give up a love object, in thwarted love affairs or through death, a modification takes place in the ego, which can be described as a reinstating or constructing of the lost love object within the ego. Thus, a mother who loses her only child gets over her grief by living henceforth like the lost love-object (2). She, as it were, incorporates the lost child into herself, and then acts as if she were the child. In the case of Mrs. P., who was for so many years in intimate contact with John, such a construction surely took place in her ego following the loss

of him. As happens among all lovers, she must have absorbed many of Johns traits and feelings, and this *object-cathexis,* as we call it, she later transmitted unconsciously to her little boy. Last, but not least, all these components were held together firmly by her strong wish to have and to hold John P. In brief, she "empathized" herself with John, the lost lover, and in turn little John, and the physical and mental resemblances between her boy and her former lover existed actually and were based on profound psychic processes.

This case does not tell us anything directly about the process of abortion, but indirectly it throws much light on the factors related intimately to it, on the subject of maternity, which is our main interest here. I have cited it as an illustration of the obverse in the picture of abortion. It gives us a glimpse of the trials and tribulations that some modern women go through to attain maternity and shows also that mere superficial questioning does not unravel the deep forces underlying maternity and abortion. Thus, Mrs. P. felt that she was able to control the process of conception by means of her will. I would not have believed it if I had not seen similar cases before and since then. Some day I hope to write a special paper on this subject.

Mrs. P. was impressed so strongly by our interview that she continued to come for a few months of analysis. The main result of these interviews was that her feelings for her husband underwent a complete change. She got rid of the old ghost and fell deeply in love with Mr. P. Soon after she completed her analysis, she became pregnant again and bore another boy, whom she now named after her husband. This was another demonstration of her capacity to conceive at will.

It is now over twenty-five years since the Mary abortion episode occurred. Four years later, she married a young man to whom she revealed her whole past. She has been a good wife and an excellent mother of four children since then, and I am always pleased to hear from her and to see her occasionally. On such visits I reflect perforce on what might have happened to Mary had she been forced to face the wrath of society for not following in its artificial and tortuous paths.

I agree with those who refuse to consider every interruption of pregnancy a criminal act. Abortion belongs to those social problems which cannot possibly be solved at the present time because we do not know enough of its phyletic implications. *Abortions are symptoms of cultural maladjustments;* like many other sexual difficulties they represent a struggle between natural laws and socalled civilization. I have seen married women who utilized abortions as a mode of punishment for themselves and their husbands. In sum, *nature forces the individual to reproduce himself, and civilization for good reasons of its own strives to stop it, or permit it only under special regulations.* Few persons are now so attuned to civilization as to follow it with unimpeded steps. Most of us are still torn by the contending forces from both sides. The problem of abortion, therefore, has remained unsolved. It is a question whether it will ever be solved to the satisfaction of all personnel concerned. Until this utopian solution is reached, it behooves us physicians to take a broad-minded view of the problem. Let us do away with the abortionists by allowing every honest physician to manage such cases as he sees fit.

References

1. *Heroides and Amores,* pp. 423-427, Putnam, New York, 1931.
2. *Das Ich und das Es,* p. 35, Int. Psycho. Verlag, Wien, 1923.

88 CENTRAL PARK WEST

CLINICAL PSYCHOTHERAPY

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Clinical psychotherapy! Isn't psychotherapy a collection of gruesome stories of Œdipus complexes, of boys wishing to kill their fathers and to marry their mothers, and vice versa for the girls? Why should medicine, why should the practitioners of medicine be interested in such things?

Psychotherapy, mind you, is the backbone of day-by-day practice, the ground on which the patient's confidence, gratefulness and faith thrive, and, at the same time, constitutes the pith of the doctor's earnings. The patient comes to the doctor to be cured, all right, but in fifty percent of the cases he wants to be treated, to be taken care of, to discuss matters, to believe, to be consoled and comforted, and enjoy friendship and guidance. And while he is nothing loath to open his heart to his doctor, there is, at the same time, resistance, ambivalence, readiness to "high treason", boyish pranks and girlish demureness in every adult man and woman. Sum total: the physician must understand his patients. The patient, in the office, is a kind of alien seeking admittance to the shores of medicine, in a somewhat inimical manner, too, while relying upon medicine's help. You are mistaken if you think that this is the type of the classical psychoneurotic only. This is Mr. Jones with his nervous heart and Mrs. Jones with her bleedings, and John Jones, Jr., suffering from asthma and skin conditions, and Miss Evelyn Jones, who is allergic and her beauty is spoiled by warts and she complains about dreams at night. In short, psychotherapy is what the physician needs every ten minutes in his working day. It is the best part of his prescription. It helps both the patient and the doctor to understand where the shoe pinches.

There will not be less diagnosis the moment the physician orients himself psychotherapeutically. On the contrary, many patients who come to tell us about their neuroses will be unmasked as pseudoneurotics, as suffering from physical conditions in addition to being trained sufferers. Psychotherapy needs more and improved diagnosis, more and careful attention to improved considerations of the right treatment, and more background and foreground.

Nor is this the whole story. At this time, when things are progressing rapidly in the field of medical econom-

ics, physicians should see to it that at least the basic relationships between themselves and their patients should not be enjoined through red tape, such as is already sprouting in group health and other public and private organizations. General practitioners and specialists, patients and doctors, are in the same boat.

Psychotherapy in general is that branch of clinical medicine in which the influence of the specific forces of the mind on mental, physiological and pathological processes is investigated and made use of for therapeutic purposes. In other words, psychotherapy is not philosophy, not metaphysics, not mere psychology, not characterology, not 'conflictology', nor the 'lore of the frustrations'. Psychotherapy does not have to take sides in the often heated discussions between psychology of the personality on the one hand, and sociology of the group and the culture, on the other.

Other declarations of neutrality: between Freud and Adler, Jung and Ludwig Frank, Leo Kanner and Brill, Schilder and the third and fourth generations of Diadochi. Psychotherapy must also guard jealously and strictly its neutrality in the economic struggle between employers and employees, in court and in jail, and wherever it may be called upon for aid and guidance.

Psychotherapy, as a lore, art and theory, incidentally is an old thing. In Plato's dialogue, *Charmides,* or Temperance, we read: "Zamolxis our king says that as you ought not to attempt to cure the eyes without the head . . . so neither ought you to attempt to cure the body without the soul. For this, he said, is the great error of our day in the treatment of the human body, that physicians separate the soul from the body."

That this type of psychotherapy is already making headway can be seen from the questions that turn up from medical audiences.

"Woman aged thirty-eight, with an artificial menopause, resulting from hysterectomy and ovariectomy. Since that time there have been various nervous syndromes, suicide ideas, and depressions. Would the case be amenable to psychotherapy or should preference be given to endocrinological treatments? Or, if the depression increases, to electroshock, insulin shock, or lobotomy?"

"Teacher aged thirty-two years complains of anxiety. She is shy and thinks that everybody can read in her face her intellectual and moral inferiority, that she cannot live up to what she is expected to do in school, and that menstruation is an undignified symptom in itself. Should she receive endocrine treatment or psychotherapy?"

"Employee with a cardiospasm; is this a case for psychotherapy, and if so, should the general practitioner try psychotherapy?"

The medicine of the nineteenth century owes its growth to its scientific bases. Natural sciences, i.e., experimental variations of conditions, isolation and quantification, were added to the casual observations of olden times. But then again individualism made its comeback into what seemed to be the realm of statistical averages. There are, undeniably, idiosyncracy, hypersensitiveness, and allergy; there are differences between the ages and the sexes. The mentality of childhood proves to be the background of child psychotherapy, as the mentality of woman is the deep hidden core in many syndromes and can and must be touched if woman's sufferings are to be alleviated. In order to cope with these individual differences, to study them intimately, the clinical method was devised, in general medicine as well as in the psychiatric clinic. In the psychiatric clinic, the method was introduced early in order to be able to answer the court's questions as to legal responsibility of the perpetrator whose plea is that of not guilty on the basis of insanity. More than one hundred years ago one would send such patients to institutions for follow-up because jurists and physicians felt that they could not make decisions of great social importance outside the intimacy of the hospital.

The Concept: Clinical

The clinical concept is not a spatial one, however. Clinical methods may be used in the hospital, in the out-patient department, in the physician's office, at the bedside in the patient's apartment, in the kindergarten, and in the social welfare office. The clinical method, to be sure, was developed by physicians as a social psychological procedure. It created intimate cooperation and companionship between the physician-in-charge, his medical coworkers, the technicians, the nurses, the attendants, the social workers, the social psychiatric workers and the patients. But there is not less clinical method in the intimate follow-up of the family doctor with no such staff involved. A background of intimacy, confidence, cooperation, guidance, psychagogy, and, last but not least, data gained and preserved according to the methodology developed in natural science, that is clinical method. But there is a difference between the clinical method and the scientific laboratory method. The latter, though, also needs consideration of individual differences. The first knowledge of the personal equation of the observer stems from the astronomer's tower (Bradley, 1795) and it makes a difference whether certain facts are established by a trained observer or a beginner, a scientist with good reputation or one whose figures, facts and arguments were never confirmed by others. Granted that there must also be a working community, in the laboratory, this does not compare with the importance of the social psychological moments in the clinical field.

This method, as we said, was developed by clinicians, at a time when the sociologists did not care much about concrete facts. So at that time they had no use for a method that rightly must bear their name, although historically it was not brought forth from their loins. There is a further historical paradox. Later on the sociologists and their kin adopted the natural child of medicine and now it was the physicians who kept aloof. For too long a time the physicians did not care any too much about the social background, or, if they did, a rather raw blueprint of social and economic conditions was accepted. It would seem, as a consequence of the misunderstanding, on the part of the physicians, of social economics, social health and social insurance movements, that the begrudging jealousy which was characteristic of the European development will repeat itself in the United States.

Be this as it may, whoever says that the background is the only thing that matters, and that in psychotherapy, at least, one does not need diagnoses, grossly overshoots the goal. It is true that, as Leo Kanner writes in *Child Psychiatry,* p. 457, and many other physicians have stated, grotesque compulsions will never

come true in actions. It may be true that many of the socially unacceptable, destructive attitudes are related to the milieu. But will they disappear with a simple change in the economic structure? Certainly not. The reactive system becomes independent. The neurosis consists precisely in the inability of the individual to adjust and readjust himself. The shiftless neurotic becomes a failure under conditions where the nonneurotic finds a thousand resources.

There is, also, the differential diagnosis. The jurists, for instance, in discussing the problem of decreased legal responsibility, tell us that it may be pathological or nonpathological, but they fail to see that this classification is not one that offers itself on the surface, in the individual case. It is an etiological, a *per exclusionem* diagnosis which can be arrived at only after examination. Wherever there is such a dichotomy of possibilities, where it may or may not be a medical case, the physician must be the first to handle the matter.

Summary

Clinical psychotherapy is based on the observation of individual variability, of the relationships between the individual and his group, of the effects of average agents, such as specifically medical, sociological, psychological, educational ones, on the individual. Clinical psychotherapy consists in the elaboration, on such foundations, of indications for the selection of methods so that we may be able to predict. Such predictions may mean the influence of certain agents during the treatment: How will a conference, a presentation, influence a child or an adult? Should a hypnosis be used in this case of child neurosis, or should play-analysis be given preference? Is the syndrome superficial, as in many gynecological or gastrointestinal conditions? What type of personality has the average tuberculosis patient and what psychotherapeutic methods suit him best? To what degree should the physician acquaint himself with experimental psychological methods, with graphology, with Rorschach? To what degree may a patient analyze himself? How about the blind spots? What are the experiences of the internists, endocrinologists, cosmetic surgeons, pediatricians, urologists, speech and voice specialists, specialists in geriatrics, in diseases of the circulation disorders, etc.? To what degree are the teachings of the schools borne out by experiences in the medical branches? To what degree and in what manner can and must the psychotherapist cooperate with the endocrinologist in a case of hyperthyroidism, with the cardiologist in a case of organic or psychogenic heart disease? (It follows, incidentally, that no lay psychotherapy can be accepted.) These are the types of questions which rightfully belong to the clinical psychotherapeutic method. There will be a clinical psychotherapy or no psychotherapy at all.

420 WEST END AVENUE

HITLER'S MIND

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Most laymen have a false idea of psychosis. They look upon all mental disorders as if they were one and the same thing and expect any mentally ill person to be a "raving maniac". As a matter of fact there are many kinds of mental disease, which differ from each other quite as much as the various forms of physical disease. There are, of course, bad cases—permanent or temporary—but the majority, particularly those belonging to the extramural forms, that is, those in which the patients are not in institutions or hospitals, are often close to what is considered normal.

There are also mentally deficient persons, mentally superior persons, and average people.

There are, indeed, all sorts of minds and various transitions between mental health and mental disease. We may truly say, in a general way, that the difference between the healthy and the sick mind, and between the highest and the lowest intelligence, is only a matter of degree.

It is, therefore, a mistake to classify a tyrant, a dictator, among the advanced cases of insanity, as has been done repeatedly in the case of Hitler for the past ten years, just because one hates his behavior. The effect, from a physician's viewpoint, would be the opposite to the one desired; that is, it would make the man irresponsible and we would have to excuse all his actions.

The boy of seventeen who, a few months ago, murdered two little girls in Westchester County, New York, was found guilty in spite of the fact that even the expert for the State said that he was mentally abnormal. He was both feebleminded and mentally deranged, but not badly enough not to know what he was doing and not to understand his own cruelty. Scientifically, we can explain his behavior, but, of course, to explain does not mean to excuse.

Even a socalled ideal behind one's deeds, as is claimed for the Nazi chief, cannot wash away their results. Nor does the aim always justify the means and the means may be, and often are, more important than the aim. A patient may look normal and ordinarily act in a normal manner, but under certain circumstances, he may become abnormal. This is true as to both psychosis and to mental deficiency.

Let us take some of Hitler's utterances: his appeal to the "Chief of State" of France and to the French in general, on the occasion of the occupation of the nonoccupied zone; his proclamation to the German people on the Nazis' tenth anniversary. Let us analyze them in an unbiased way.

What strikes us mainly in these documents, as in previous ones by the same author, is the fact that they show the symptoms of an unhealthy but not too badly damaged mind, and of an abnormally low, though shrewd, but not very low, mentality.

A sentimental appeal, even at a moment of despair, to a nation which is and must be bitterly unfriendly to its conqueror, is certainly unintelligent, and as he is undoubtedly fully aware of the feelings of his victims, this is not merely hypocrisy. It is worse. He actually believes he can fool them—a frequent symptom of abnormal mental states. This is similar to his—unsuccessful—attempt, earlier in the game, to deceive the

world at large, and his own country in particular, as to the cause of the Reichstag fire; as to his purpose to save Europe from Communism; as to the racial superiority of the German people; as to the absolute necessity of his attack on Czechoslovakia and Poland under the pretext that they persecute the Germans or are unjust to them: later his attack on the Netherlands, Denmark and Norway as a war measure, and on Russia under the excuse that she was about to invade the whole of Europe. All of this he could have done had he been a real superman, without giving any explanation or justification whatsoever.

To the same series of apparently reasonable but in reality dull actions belongs his huge, spectacular mass sterilization of the unfit, pretending to aim at their total eradication and ignoring the fact that they are but effects of deep causes, which, as long as the latter remain present, must in due course produce other unfit individuals.

When he speaks about "the establishment of a better European solidarity", he is not abnormal, he only makes use of old-fashioned dishonest diplomacy, meaning, as he does, solidarity with him. But when he exclaims that "the German Reich did not . . . take advantage of the weakness of France in order to indulge in extortions" . . . he says something that any child in France knows to be a lie—and he is fully aware that no Frenchman can be fooled about it. Indulging in extortions—is precisely what he has done, and it takes an abnormal mind to try to convince anyone of the contrary. He forced France to pay for the maintenance of the German occupation forces about twice as much as it cost. He humiliated a great country and plundered it from all points of view. Never in history have such harsh terms been imposed by a victor upon the vanquished at the conclusion of an armistice—and this goes for all countries conquered by Germany in the present war. In 1871, after the defeat of France by Bismarck, the penalty exacted by him was incomparably milder—and, heaven knows, he was by no means tenderhearted or merciful.

"The entry of this continent into a new state of war", the Fuehrer continues, "must bring about the destruction of all European nations and especially of European culture". To see the real destroyer of culture even in his own country, let alone the Belgian, Dutch, French, Czechoslovakian cultures, shed tears for European culture, is not only sad and ridiculous, it shows a good deal more abnormality than one is willing to concede to him. It is a pose which tries to disguise his own sins and also a belief that the intelligent and sane world will swallow it. No one, of course, can take seriously the man who ordered the burning of the books harmful to him, who failed to respect the Tchaikowsky and Tolstoy sanctuaries in conquered Russia, and who did not lift a finger to prevent their desecration.

A further passage in the above quoted documents reads: "The British Government, without cause or reason, declared war . . ." This he repeats for the nth time, never admitting that he first created a situation that compelled others to declare war on him, which was a smart but unintelligent performance as it succeeded in deceiving the nitwits only. However, by believing that normal people would fall into the trap he exposed his own mental poverty.

Anti-Semitism as such may be a sign of misjudgment or of ignorance of world conditions, but it is not a symptom of mental abnormality. When a statesman, however, commits the blunder of connecting the two most hostile social extremes, capitalism and bolshevism, there is surely a cloud in his mind. But to try to convince the world that "international Jewry attempted to plunder the nation by capitalist means in order to make her economy right for Jewish bolshevism", as he says, denotes a really low mentality. The plain man in the street, if he reads his newspapers, knows that capitalism, which is not exclusively Jewish, cannot encourage bolshevism which signifies the disappearance of the former.

A mentally deficient child is clever enough to avoid the children of his own age in comparison with whom his inferiority would be evident, and he plays with those much younger than himself, in the hope, sometimes accomplished, that they will accept him. That explains our celebrated patient's attempt at annihilation of real culture and the banishment, under one false motive or another, of the best and loftiest minds from the Germany of the present ruler.

A manic-depressive person may deceive even his doctors and act as if he were greatly improved or cured, so that he might be permitted to leave the hospital earlier than the doctors otherwise desired. This is another form of deceit and it is called dissimulation. A patient suffering from a lighter degree of the same disease, who has been frustrated and has remained unadjusted, may believe that he will be regarded as normal when he points to others as guilty of his own sins. And so we see our hero in these papers speak of his abhorrence of bloodshed in war and of his hatred of brutality.

The same may be said about his pose as a martyr, as a savior of the entire world from the invasion of others, of which there never was any sign, and when the real invader of both the West and the East of the European continent is the man who hurls the accusation.

The fact that he is mentally abnormal and, at the same time, able to use sane and even perfect methods to beat his enemies, is not a surprise to mental experts. All psychiatrists know that our psychopathic institutions contain many persons with mechanical and other talents and even geniuses. And are not mathematical wonders who are also morons shown in circuses?

Frequently the mentally abnormal patients are certain of their own mental health and call other patients insane or give them all sorts of disparaging names. Is there not some truth in the anecdote about the patient making fun of his room-mate who was sure he was Jesus? When asked how he knew that his friend was wrong, he answered, "because I am God", which really meant that he had a worse feeling of inferiority than the other patient and that he had to aim higher to cover it up. Hence, the idea of the superman. In his proclamation to the French, and more so in some of his previous speeches, the German dictator hurled all kinds of epithets at enemy military and political leaders and statesmen: they were all idiots, nincompoops, or were crazy. He never knew how he gave himself away. It was a wishfulfillment, a subconscious desire to appear perfectly normal in contrast with them and, also subconsciously, it was a recognition of his own inferiority—the superman as a subman.

A psychiatrist, looking dispassionately, not only at

Hitler's diplomatic antics, but also at his strategy and tactics in war, must come to the conclusion that they originate from an inferior mind and that his fanatical trust in success can only be due to a disturbed mentality. Here are some of his most obvious errors which point to abnormality:

His belief that he can scare the world and keep it scared by his rapid movements;

His conviction that the national resistance of peoples other than the Germans can melt and become nonexistent at the approach of the master-conquerors;

His inflated personality leading to a disdain of every non-German, to a complete lack of honor and moral obligation toward adversaries, and therefore to cold-blooded massacres of helpless victims;

His unintelligent failure to foresee that his actions must drive England and America into a friendship with Russia, which was the very opposite of what he had desired;

His miscalculation of the moral power of such countries as England, France and Russia and his lack of understanding of the position and strength of the United States;

His misinformation about the military force of other great nations, always replacing patient and careful study by the cheap, dramatic, childish, breath-taking surprise element;

His quick, extreme and imprudent advances into the unknown, without foresight as to the necessary means of holding what he has conquered; or, as it were, his inability to swallow and digest his bite;

His contention—and his effort to make others believe—that Europe is in danger because the Russians are taking back their *own* territory;

His ridiculous claim, when repelled by an enemy, that he is retreating "according to plan", because neither he nor his army can ever make a mistake;

His destructive superactivity in general;

His exaggerated and unlimited faith in his own people, in their endurance and in their worship of his own person and of his political party, in spite of a complete lack of a definite economic program and of any real promise;

His foolish confidence in the cooperation and collaboration of the conquered peoples, whom he never spared any insults and cruelties and to whom he never gave a word of hope or encouragement;

His certainty of keeping them permanently in chains —his new era or order is to last a thousand years—always resenting their rebellion as something entirely unexpected;

His arrogance and anger at the sight of retaliations, as when the British started to bomb Germany;

Finally, his misuse of the word "socialism" in the name of his party, while it may seem shrewd, is based on lack of intelligence, as it fools nobody, and on the paranoid necessity of heading the greatest cause of the century.

Conclusion

The closest diagnosis in this case is, in addition to a mental deficiency hidden by an apparent show of "brilliancy", *psychopathic personality characterized by paranoia, but no real insanity.*

This patient presents all the signs of paranoia, a condition which is usually a symptom of other mental diseases, but which, as we see here, also occurs as a disease-entity in itself. His megalomania, or the feeling of extreme grandeur or greatness, his sense of an important mission, go hand in hand with the fear that others may fail to recognize his significance. Therefore, suspiciousness, ideas of persecution—that is, of being persecuted—and violent aggressiveness.

As such mental trends are communicable or contagious, many Germans—fortunately not all—have become infected and have acquired a *collective paranoia.*

65 WEST NINETY-FIFTH STREET

MALINGERING IN THE ARMY

SAMUEL KAHN
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Malingering is an attempt to fool others into believing that one is sick mentally or physically. In other words, malingering is a behavior, an action, or an attitude (or perhaps a combination of these) affected for the purpose of making army officials and medical men believe that there exists mental, emotional, or physical illness. At the same time there is a deliberate attempt to disguise the motivation and purpose.

The following instances of attempted malingering either came under my personal observation or were told to me during one year's service in induction offices and in a large Army camp:

A selectee put powdered sugar into the wallet which he carried with him while being examined. All clothes of selectees were placed in lockers, usually left unlocked during the examination. When told to urinate to provide a specimen, he professed an inability to urinate in the presence of others. He took the bottle to the toilet and, after urinating, emptied the sugar into the bottle. On analysis, sugar was detected in the urine. When a recheck was attempted, the selectee again refused to urinate publicly. He then asserted that he could urinate no more. When he had been kept for some time it was insisted that he could urinate, and he did, but this specimen was found clear. By means of suggestion and urging him to be truthful, he was induced to admit his intended malingering.

Another selectee was found to have blood in one urine specimen but not in another. A combination of suggestion, persuasion, urging, and threats made him admit that he had sucked his gums and spit blood into his urine.

A man in the hospital complained of having spit blood against the wall. No red blood cells were found in the scrapings. With a further application of psychological methods he confessed to having used mercurochrome.

Two men were examined and the pulse rate of each was found to be persistently over 110 and the blood pressure above 150. Consistent questioning finally uncovered the fact that these two men had been on a week-long tour of dissipation prior to the examination.

They had remained drunk during all this time. If malingering had not been suspected the two would have been rejected for hypertension with chronic myocarditis.

An inductee complained of double vision and stuck to his story that a doctor was treating him for this malady. He said that the condition had folowed an automobile accident. His neurological and psychiatric examinations were otherwise negative. By the use of prism tests, which the selectee had never seen before, he confused the normal with the duplicate object; that is, he did not see the red and the white objects in their proper locations in this artificial diplopia. This same test was given to several medical officers who had become interested in proving or disproving malingering in this case. The prism test was proved by the ophthalmologist and other medical officers to be accurate. This selectee was pronounced a malingerer, and, being healthy otherwise, was inducted.

A number of selectees contended they had poor vision or blindness in one eye and attempted to malinger with the various standardized eye tests. School authorities, families, physicians, friends, and drivers' licenses were checked, and after psychological cross-examination, some confessions and proof of malingering followed.

Some who malingered hearing defects were discovered after inquiry of friends, relatives, physicians, and through schools, telephone calls, stethoscope tests, observation of behavior, audiometer and other hearing tests, such as the dropping of coins.

Many tried to malinger flat feet with pain, but again psychological treatment coupled with examination of shoes, of the naked arch, of painful pressure points, of callouses, and of gait, brought admissions and revealed malingering.

A few inductees had had many, or all, of their teeth deliberately removed. They were turned over to the authorities for further action.

Some selectees, although they could furnish no proof through physicians or hospitals, said they had asthmatic attacks, but examination revealed no râles or other allergic histories. Hence, they were accepted for the army. Those who submitted proof from doctors or hospitals, and who also revealed râles were rejected.

The differentiation between neurosis and psychoneurosis and the feigning of these conditions presented quite a difficult task with many selectees. At times, it was felt that the benefit of doubt in instances of suspected malingering, should be given to the "side of neurosis". At other times the opposite view was taken. When a patient laid claim to a number of symptoms over a period of years, and gave the names of doctors, particularly neurologists and psychiatrists who had treated him, he was declared a nonmalingerer, but when he complained of many symptoms and could not give the names of the doctors who had treated him, he was generally classified as a malingerer. No doubt a large number of selectees who claimed neuroses were not detected. On the other hand, there is no doubt that a large number of genuine neurotics remained undetected as such, and were accepted. It is this latter group that will undoubtedly cause the Army and the Veterans' Bureau much trouble at future dates. Nevertheless, no definite stress was placed upon the detection of this group. This is probably caused by the fact that there is more ignorance, misinformation, and superstition surrounding the knowledge, diagnosis, treatment, and prognosis in the neuroses and psychoneuroses than of many other conditions.

Few selectees tried to feign a definite psychosis or insanity; for it is difficult for laymen definitely to malinger delusions and hallucinations in the presence of a board of psychiatrists, unless these laymen have had special training in psychology or psychiatry, or unless they have been inmates of mental clinics or institutions. Some selectees have adequately malingered depressions and were rejected on that basis. These decisions were predicated on the correct assumption that if a selectee could so accurately imitate a depression he would probably be useless in the Army anyhow because of his instability, emotional deviation, and general mental makeup.

A number of selectees feigned feeblemindedness and illiteracy. Malingering was either proved or disproved by scholastic history, occupational history, driver's license, statements made by friends examined on the same day, and performance and illiteracy tests. Where, after ruling out deterioration, there were obvious attempts at noncooperation and an exaggeration of stupidity inconsistent with the selectee's occupation and past performance, a clearer diagnosis was made. Attempts at this type of malingering were surprisingly frequent. One selectee insisted that he could not read "m-a-n" either in print or writing, nor could he spell it, but he drove a car, had a driver's license, worked at odd jobs in various locations, travelled alone without getting lost, earned from thirty to fifty dollars a week, had a girl friend, attended movies and athletic games, had friends, etc. He insisted that he could not read, write nor spell the words, "see, woman, man, cat, rat, etc." He could not calculate nor even write figures, yet he had received good salaries, and as part of his work, even gave estimates on jobs. During the Knox-cube test he acted as if he did not grasp what was required of him and exaggerated his errors. In Marie's test, not only did he fail after ten attempts, but substituted ridiculous additions. It was difficult, on the day he was examined, to get a scholastic, or any other, history of this selectee. He carried with him over fifty dollars in cash and was well dressed. He was quite well informed about athletic events of the day, yet insisted that he could not read the newspapers. He repeatedly stated that he did not mind entering the Army. He was pronounced a malingerer and was accepted.

Several selectees claimed they had epilepsy. Some of these men showed no scarred tongues and had no neurological signs. They were taking no medication, and did not know nor could they describe any medication which they had taken. They had attended no clinics and had no witnesses to their attacks, "except a certain friend who might know about it", or they gave vague histories of some kind of fainting spells, but could not give the names of doctors who had treated them. Hyperventilation tests proved negative, even though the selectees were taking no medication. Under such conditions they were pronounced malingerers and inducted into the Army. When, in addition to the doctor's having definitely ascertained that the patient was being treated for epilepsy, the patient admitted medication or hospi-

talization, and when the tongue showed scars or the face showed marks caused by falls, or when the patient provided confirmation by witnesses to his attacks; then he was pronounced epileptic and rejected. One selectee, rejected because of epilepsy, was returned to the induction board for re-examination as a malingerer. Again he was rejected as an epileptic. He was then returned a third time with a letter stating that the local board had information that he was a malingerer. Re-examination showed him to have a scarred tongue, a face scarred from falls and a speech impediment. He was then given a hyperventilation test. After two minutes he went into a status epilepticus, from which he was aroused only with difficulty after a long period. This was recorded on his history and he was again rejected. Oddly enough, this selectee wanted to join the Army.

A few selectees cried during examination and became panicky. They developed tremors and spasticities and could not cooperate. The diagnosis was psychoneurosis with hysteria, and the men were promptly rejected.

There were other selectees who gave histories of encephalitis, meningitis, poliomyelitis, and of head injuries. Where such histories were corroborated by neurological indications, such as exaggerated, absent, or unequal reflexes, tremors, spasticities, and definite muscular weaknesses, then rejection followed. Otherwise, these selectees were considered malingerers and were accepted. There were several who gave histories in which doctors had diagnosed their conditions as multiple sclerosis, hemiplegias and chorea. Where these conditions existed and where nystagmus, intention tremor, reflex disturbances, disturbance of sensation, tremor, and muscular weaknesses were found, rejection was the decision; otherwise, they were accepted.

Some gave a history of syphilis, but few claimed to have cerebrospinal syphilis. No spinal punctures were made at the induction boards, but rejection followed a finding of positive serology or neurological signs.

Other selectees claimed they were chronic alcoholics. Where the selectee showed alcoholic deterioration, a psychosis, a definite psychopathic personality, or even showed just marked instability, he was rejected. Otherwise he was typed a a malingerer and accepted.

Those who said they had committed one or more crimes were investigated and rejected if one or more felonies were substantiated. Misdemeanors not associated with states of psychopathic personality were accepted. The claims of many and serious crimes, made by some, were uncorroborated. Hence they were classified as malingerers and inducted.

Some claimed sciatica. Unless definite local pains, neuritis, muscular atrophy, or reflex changes were manifested, these malingerers were accepted.

In those who complained of backaches we looked for local spasms, twitchings, limitation of motion, muscular changes and real pain on bending. If these findings were definite and the x ray plates which they had brought with them showed arthritic changes, they were rejected. Generally, however, there were no objective findings and the selectees were accepted.

There were some selectees who complained of lung conditions, particularly tuberculosis. A history of having been in an institution for the tuberculous or a report from a reputable source that showed the selectee had been treated for tuberculosis, as a result of positive x ray or sputum findings, was sufficient for rejection. Some said they had tuberculosis but could give no reputable confirming source, and if in addition their x ray plates at the induction station were normal, they were accepted and were considered malingerers.

There were also claimants of glandular difficulties, such as hyperthyroidism and Fröhlich's syndrome cases. If the pulse was not accelerated, and the selectee had good weight, a normal heart, and showed no other serious deviations he was accepted. No basal metabolic tests were made at the induction station; the diagnosis being made purely on a clinical and history basis. If the pulse rate was increased and accompanied by tremors, and if there was some question of the heart condition, and if there was a weight disturbance, the selectee was rejected. Where the selectee showed the Fröhlich syndrome in a mild form, he was accepted. Some with mild Fröhlich's symptoms tried to exaggerate them, but to no avail. Where the Fröhlich syndrome was considered severe, or even moderate, rejection followed. Those rejected were overweight, were usually abnormal in size, showed hair distribution deviations with very small genitals, or other glandular deviations, and frequently had hypertension.

Viewed collectively, the malingerers either tried to pretend mental, physical, emotional or social symptoms which they did not have, or else they tried to exaggerate the few symptoms which they did have, either through untruthful statements, poor cooperation, or by submitting letters and statements from others who either did not understand or who misrepresented.

While on temporary duty at Fort Dix Station Hospital, I was called to see a patient at the Tilton General Hospital. Here the patient was in an iron lung surrounded by doctors and nurses. He had been on emergency treatment and contended that he had an attack lasting about a week. There were times when it appeared that he would die, and hence he remained in the iron lung. Most of the staff agreed that he was critically and acutely ill and that he had at least an asthmatic condition; they were looking for pneumonia, tuberculosis, and other serious ailments. One staff member thought of the possibility of malingering, even though it appeared far-fetched, as the soldier had been dying for a number of days and was still in the iron lung. When checking the patient's history, I learned that he was a "broken sergeant" transferred from Panama. The acuteness of the condition seemed too severe to me; the sergeant wanted too much sympathy and attention and was getting it. The advice was given that he be removed from the iron lung and receive much less attention, and be placed in a private room with one nurse or attendant only. Some of the staff immediately disagreed and described it as "murder". These recommendations, however, were carried out. The following morning, with the patient in a private room rather than an iron lung, a return to normality was found. The differential diagnoses were status asthmaticus, malingering and hysteria. Hysteria was no doubt the proper diagnosis.

This article briefly presents a general and fairly complete picture of attempted malingering by selectees and others in the U. S. Army during 1941 and 1942.

416 OCEAN AVENUE

THE SEEN AND THE UNSEEN AT WORK IN OUR SOCIAL STRUCTURE*

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A French scientist once stated: "In scientific research be extremely careful for fear you may find exactly what you are looking for". How true such words are in the field of sociology and with sociological problems and how many times they are quite distant from the real situation. How often one is led to base his interpretation upon a complex of defensive or reactionary facts and how often he will avoid or utterly neglect the actual setting of those facts, especially with regard to the interrelation or linking together of the many factors which play such an important part in our social make-up. It is true, a person may have an infectious disease or a permanent injury or even economic and financial distress; so, too, society may suffer from its corresponding infections, injuries and financial distresses.

To all these entities social work endeavors to extend a helping hand; to aid in fighting those particular things which seem to be keeping society and its component parts from a mental and a spiritual freedom, and also those things which seem to be dragging down the individual members of society, such as poverty, illness, mental conflicts, bad environment and ignorance; always striving with the harried and the beaten individual, the socially handicapped and all other members of society who appear to be and actually are subdued, conquered, or squelched by life itself; to help them that they may win their way back to a freer way of living and that they may have an opportunity to progress from a mere vegetative existence into a life of peace as well as activity.

Progress may be movement in any forward direction. Of course, it does not always mean moving in the right direction, but in sociology, as in all sciences, the basic structures are acknowledged and the current values accepted. To restore an insane person to mental health compatible with himself and society; to train a feeble-minded person into at least some of the avenues of usefulness and productivity, rather than reproductivity; to reclaim a delinquent; to teach the physically handicapped to be self-supporting; to select a fitting foster-home and establish a training and a proper up-bringing for the orphan; all must have some value. If we accept these as true values, it must be the duty of society to see that the specific needs have their specific remedies and that these remedies are not tainted with half-hearted gestures, made merely to soften and satisfy our conscience or the whims or even the vengeance of a single-track mind.

The problems of social welfare are all well-known. The ills of society are all about us, and the goal should be the easement of those ills, those handicaps that are enslaving some members of this society; and, to a great extent, the remedies are within our reach. It is a fact that the goal has never been wholly achieved, neither has the perfectibility of man. On the other hand, however, we are all aware that the elimination of drudgery by mechanical devices is not in itself going to make man happy. There will be some component force which will tend to take away some of the deadening influences of this industrial civilization.

The rapid development of industry and commerce has brought about such reciprocal relations of people that no man can afford or, perhaps, dare to stand alone, for, tied in with this rapidity are the fundamental attributes of our present social make-up, financial strength, economic bouyancy and political harmony, all of which in this day present us, not with financial strength, but with a financial breakdown; not an economic bouyancy, but an economic revolution; not political harmony, but political fragmentation. Emotions and beliefs hold us together and it is only when we have a clean-cut concept or an ideal crystalized in the public mind, that we may expect to have the force of public opinion behind us. For as long as the voice of the public is inarticulate or shrouded with unrelated falsities, so long will we muddle along; yet when it is heard with genuineness, it has the magic that will remove mountains.

Civilization, in many ways, has undoubtedly increased human misery, but at the same time it has given us manifold opportunities for happiness, and it is happiness in a wider and fuller sense than ever before. It has give us a chance to add greatly to the sum total of all human enjoyment, and we must use those forces and devices given to us by science. In our comparative approach we must not lose sight of the fact that the eyes and ears of civilized man are no better than those of the savage, but science has given us the microscope, the telephone, the radio and television; the legs of civilized man are no sturdier, maybe less so, than those of the savage, but science has given us the automobile, the aeroplane and the stratoplane; yet, science with all its master minds has not given us a solution of the problem as to how we may enjoy all these wonderful things should our minds be troubled or our spirits weary. Hence, one may draw the conclusion that the progress has been incomplete and that it is the duty of the social sciences to find a way out, so that man can and will enjoy those things under all the strains and stresses to which he may be subjected.

For hundreds of years data on the theory of human progress have been piling up, all directed towards that one goal, the elimination of human misery. Even suffering may be a necessity so long as it does not enslave man. It is those things which prevent man from reaching the fullest expression of his latent powers, his abilities, the 'critique' of his higher centres, that the medicosociological approach is trying to eliminate.

You cannot consider men living together in the community as just a pile of bricks thrown haphazardly together. They should be judged more as a well-constructed building held together by cement. Then the building will be stronger than the bricks that are in it along with the quality of cement that holds them together. Hence the weakling, the unfit, the misfit, must be made stronger, trained more efficiently and placed

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in such environments as will be conducive to the exercise of their budding talents, their potential abilities, though those talents and those abilities may be ever so humble.

It is not my object to leave the impression that all the ills of society are tied up in social welfare, per se, or such contacts as social welfare has with society in general. When those persons, however, do come into such a conflict with society, that is, they are forced upon us, we must meet them fairly and squarely. Scattered all through society are men and women who are devoting their entire life to protect, assist and cure thousands of such persons who never enter into the realm of public or private social welfare, and are without any idea of broadcasting or delving into propaganda relative to it. The line of demarcation between those disturbed, disabled or afflicted persons we happen to know about and those who never come under this classification, is very definite, and the unseen worker is to the latter type as the public and private worker is to the known socially handicapped and infirm.

One cannot help but look upon the unseen worker, who surely is a refreshing contrast to the majority, as possessed of strong characteristics; he is usually a savant of high reputation whose ambition is to give a great deal of happiness without any programs. Necessarily, he makes no parade of his work, and he sits down to the task just as a hungry man partakes of a meal. He requires no buffered help or compulsory assistance through political patronage. He is always accessible and always ready to help, never sparring for time. And what is so characteristically lacking in the majority bursts forth as a reality in him, namely, a sense of humor within himself and a recognition of humor in others. It is not painful for him to laugh and his patience and his sympathy dominate his activities.

For us to do these things it is necessary to have the ideals embodied in the minds of people in general, not only in the workers themselves, and it must be our objective to construct or reconstruct human beings so that they may lead a happy and a useful life, using as a medium our institutions and such agencies, governmental or otherwise, as tools and as a means to an end.

No one with any sense of independence likes to be supervised, and I can heartily sympathize with any person who is a ward, public or private, and further, that any unnecessary supervision or any attempt to regulate the lives of human beings, unless under absolute necessity, is an invasion to the saturation point of that person's inviolate right to live his own life. The State can not and should not set out to regulate the life of anyone. It should not attempt to take away from any person the right to make his or her own decision, unless it is proved conclusively that that person is incapable of freedom and then, and then only, for the protection of the individual and society, should the necessary evil of supervision be used.

To do this tactfully and justly requires, in all branches of the service, persons who have themselves learned to live, who are themselves free from every pettiness and of prejudiced hatreds; those whose ideas of life are based on firm footings and not warped by suspicions and conspiracies; in fact, only those who have learned to live their lives fully. The blind cannot lead the blind; the paranoid may lead you to an abyss; the narrow soul cannot lead the unadjusted girl or boy back into reality or along a highway that he himself has never traveled. It may be possible to teach a child to be all that one is not oneself, to teach him to hold to ideals which one can conceive of for others but cannot attain oneself, but that way is far from secure. Just as a teacher, who must live close to worthy ideals, as otherwise, the pupil who sees sharply and thinks intelligently will be affected, not only by what is said, but also by what the teacher is.

I cannot state the philosophy of medical sociology any better than by quoting, "The stone which the builders rejected, the same has become the head of the corner". So, too, those whom society may now reject or ignore might very well become useful stones in the fabric and structure of our present day civilization.

51 EAST NINETIETH STREET

POLYNEURITIS WITH FACIAL DIPLEGIA FOLLOWING SERUM SICKNESS IN AN ADULT

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With the increasing use of antitoxins because of the war, the occurrence of any unusual reaction is worthy of recognition. The resemblance of this reaction to other diseases of the central and peripheral nervous system makes its differential diagnosis immediately important.

Review of the Literature

A description of the syndrome of polyneuritis with facial diplegia has appeared in the literature under many names: acute febrile polyneuritis, polyradiculoneuritis with albuminocytological diassociation, radiculoneuritis, meningoradiculoneuritis, myeloradiculitis, etc.

Doyle (3) reviewed the literature and reported forty-nine cases with neurological manifestations after serum therapy. Among them were six cases of optic neuritis; eight cases of mononeuritis, one involving the brain and meninges and one with myelitis. Mild lymphocytic reactions of the spinal fluid were present.

Forest Young (2), after reviewing the literature, reported only one case of facial nerve palsy.

Rosenbaum (1) reports the case of an adult male who developed trigeminal neuralgia involving the second and third division of the left trigeminal nerve following the prophylactic injection of tetanus antitoxin.

Foster Kennedy (4) describes brain and meningeal symptoms in the nature of transient convulsions, ocular papilledema, transient palsies synchronizing with urticarial manifestations outside the nervous system, following the subcutaneous injection of serum. He reports five cases of fulminating cerebral symptoms, brachial

plexus and circumflex lesions. In two other cases there was unilateral paralysis of the long thoracic nerve and in one case a generalized polyneuritis following typhoid inoculation. He explained the symptomatology on the basis of the toxicity of the serum or the urticarial edema of the perineural tissue.

Gilpin (6) found pathological changes limited to the peripheral nerves and dorsal root ganglia. The anterior root cells, as well as the rest of the spinal cord, is not involved in the process, which consists mainly of a patchy degeneration of the myelin with fragmentation of the axis cylinders of the peripheral nerves without evidence of inflammation.

Captain Robert J. Hoagland, U. S. Army (8), reviewed seventy-seven cases collected by Lhermitte and Haguenau and commented on the possible serious complications associated with serum neuronitis.

George Wilson and Samuel B. Hadden (9) reported six cases of multiple neuritis following serum therapy.

A most unusual case of auditory nerve involvement after tetanus antitoxin, is recorded by Richard D. Cutter (10), in which the patient developed noises in the ears and deafness. The audiogram, some months later, showed a reduction of forty percent in hearing.

Gordon R. Kamman (5) describes the syndrome of polyneuritis with facial diplegia following serum sickness in an adult. He also describes the clinical symptoms and emphasizes the commonest feature as the dissociation of the albuminocytology in the cerebral spinal fluid. He feels that this symptom complex should be so designated "polyneuritis with facial diplegia", because the pathological changes in the central nervous system are variable.

The clinical picture which he describes is an initial latent period followed by some mild sensory changes and fibrillary twitches. Weakness and paresthesia begin in the lower extremities involving the muscles of the trunk to some degree, and also the upper extremities. There may be some impairment of vesical and rectal function.

Because the case described by Gordon R. Kamman resembles so closely the following case to be presented, I am using the same designation in the description of another case of "polyneuritis with facial diplegia, following serum sickness in an adult".

Case Report

The patient, a man aged thirty, was admitted to the St. Joseph's Hospital, Far Rockaway, N. Y., following an automobile accident, in which he received a laceration of the chin, which required three black silk sutures for closure, and some brush wounds over the anterior aspects of both legs. The patient was given 1500 units of tetanus antitoxin, supplied by the Department of Health, New York City.

A complete physical examination at the time of admittance was entirely negative except for the above described injuries. Blood count: hemoglobin, 89.4 percent; red blood cells, 4,200,000; white blood cells, 10,100; polymorphonuclears, 76 percent; basophiles, 7 percent; lymphocytes, 20 percent; myelocytes, 2 percent; juvenile cells, 2 percent. Urinalysis: reaction acid; specific gravity, 1.007; albumin, negative; sugar, negative; acetone, negative. Microscopical examination showed a few epithelial cells and an occasional white blood cell.

The temperature, pulse and respiration were normal. On the third day the sutures were removed and revealed primary union. A few superficial skin wounds appeared clean and granulating.

On the fourth day a swelling, about the size of a walnut, appeared under the left arm. This was freely movable and tender to the touch. The following day an area of redness surrounded the original point of inoculation of the tetanus antitoxin. This was accompanied by a general itching associated with the appearance of a few urticarial wheals.

At the end of the seventh day, the above described symptoms disappeared and the axillary adenitis had subsided. The patient felt well, was up and about and was discharged the following day.

On the tenth day the patient experienced numbness and peculiar, severe pains in both legs which required sedation for comfort. He was readmitted to the hospital with the following physical findings: generalized hyperesthesia of both lower extremities, and a complete absence of both patellar and Achilles reflexes, and absence of the cremasteric and abdominal reflexes. No pathological reflexes were present.

Tendon reflexes of the upper extremity were present but diminished. The face revealed a bilateral facial palsy. The patient was unable to wrinkle his forehead or close his eyes, and his tongue protruded in midline. He was also unable to grimace or use the muscles of expression. There was no disturbance of sensation of the anterior two-thirds of the tongue. Hearing was intact.

Eye consultation: Examination by Esterman showed the following: Marked weakness of orbicularis oculi along with complete facial paralysis. All extraocular muscles were normal (III, IV, VI). There was no exophthalmos and the pupils reacted normally. Media was clear, and ocular tension normal. The fundi showed disc margins sharply defined, and the discs were not elevated, congested or hyperemic. The retinal vessels were of normal caliber. Blood count was normal, and the urine was also normal. Spinal fluid was clear, not under pressure, no cells present. Sugar, 75 mg.; albumin 2 plus, globulin 2 plus.

Discussion

The association of marked disturbances of the nervous system with the administration of antitoxins, has long been recognized. Its infrequent occurrence has caused it to be meagerly described in the standard text books on medicine. Cecil's *Text Book of Medicine* gives a complete description of serum disease and serum accidents and in a few lines states: "Rare neurological complications, such as neuritis, polyneuritis, transient monoplegias or hemiplegias have been described mainly by French observers".

The case described above presents a fairly distinct clinical picture. There is a latent period of ten days to two weeks. There is, at first, mild sensory disturbances or fibrillary twitchings. Some impairment of vesical or rectal function may develop. Paresthesia and weakness begin in the lower extremities involving the muscles of the trunk and the upper extremity to a degree. The choked disc has been observed.

One of the commonest features of fascial diplegia with polyneuritis is the albuminocytological dissociation of the cerebral spinal fluid. The occurrence of a

normal cell count and an increase of the fluid proteins are constant findings. Cases have been described in which the spinal fluid protein rose to 1500 mg. per 100 cc.

Kamman and Weisberg feel that one is not justified in making a diagnosis of polyneuritis with facial diplegia without these spinal fluid reactions.

Summary

1. A case of polyneuritis with facial diplegia is presented.

2. The different neurological manifestations following serum are described and reviewed from the literature.

3. The clinical picture and the constant spinal cord findings are emphasized.

4. Considering the many injections of serum and its valuable contribution to prevention of disease, this infrequent manifestation of serum should not deter from its continued use.

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A COMPARISON OF THE STIMULATING EFFECT OF AMPHETAMINE, DEXTROAMPHETAMINE AND DEXTRO-N-METHYL AMPHETAMINE (DEXTRO-DESOXYEPHEDRINE)

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The stimulating action of racemic amphetamine (alpha-methylphenethylamine, benzedrine) sulfate has been investigated extensively (1, 2). Prinzmetal and Alles (3) have stressed the fact that the central nervous stimulating potency of the dextrorotary isomer of amphetamine (d-alpha-methylphenthylamine, dexedrine) was one and one-half times to twice that of the racemic sulfate. They also stated that fewer peripheral effects were observed when dextro-amphetamine sulfate was administered. Both these compounds were given orally.

Dextro-N-methyl amphetamine (dextro-desoxyephedrine, pervitin) has been widely used in Germany by civilians and soldiers particularly by those in the air corps (2, 3, 4, 5). This compound is said to produce a stimulating action on the central nervous system which is twice or three times that of amphetamine. Dextro-desoxyephedrine is administered orally in the form of the hydrochloride salt. It is the dextro-isomer of methyl amphetamine.

Because of our previous experience with amphetamine and dextro-amphetamine sulfate (6), I decided to compare the action of these two compounds[1] with that of d-N-methyl-amphetamine hydrochloride (dextro-desoxyephedrine hydrochloride)[2]. In view of the variable effects produced by ephedrine (7) and amphetamine (8) in different persons, each of these three allied pseudosympathetic amines were administered to the same person. A period of at least seventy-two hours intervened between oral ingestion of each preparation. The order of administration of each preparation also varied. Some subjects received amphetamine first, others dextro-desoxyephedrine, etc.

Eight normal subjects, four of whom were females, and eight depressed patients at the Syracuse Psychopathic Hospital, were given ten milligrams of each drug in the early forenoon. Observations were made with reference to the effects produced by these compounds on the psychological reactions and on the blood pressure and pulse. The results were studies with respect to the following phases of reaction:

1. Time of onset of effect
2. Length of action
3. Increase in motor activity
4. Production of insomnia
5. Euphorizing effect
6. Occurrence of untoward effects
7. Effects on blood pressure and pulse.

Results

1. *Time of onset of effect.*—Dextro-desoxyephedrine produced the central stimulating effects most rapidly and amphetamine least rapidly. The average time of onset of effect following dextro-desoxyephedrine was forty-one minutes; after dextro-amphetamine fifty minutes, and subsequent to amphetamine sixty-one minutes. The patients in most instances responded more rapidly than did the normal subjects.

2. *Length of action.*—Of the three drugs, dextro-desoxyephedrine produced central nervous system stim-

[1]The amphetamine and dextro-amphetamine (dexedrine) used in this study was furnished through the courtesy of Theodore B. Wallace of Smith, Kline and French Laboratories.

[2]The d-desoxyephedrine used was furnished through the courtesy of George E. Hazel of Abbott Laboratories.

ulation for the longest period of time. Following dextro-desoxyephedrine, the average length of action was fifteen and two-tenths hours; after dextro-amphetamine thirteen and one-half hours; and after amphetamine seven and seven-tenths hours. Dextro-desoxyephedrine produced an effect of slightly longer duration on normal subjects while amphetamine had a slightly more prolonged action on patients than it did on normal subjects.

3. *Motor activity.*—Dextro-desoxyephedrine produced the greatest degree of motor stimulation in patients and normal subjects. In nine of the sixteen subjects who received this drug a marked amount of restlessness was noted. This great degree of activity occurred in only five of the subjects when dextro-amphetamine was administered and in only three of these who received amphetamine. The motor response of normal subjects to dextro-amphetamine and dextro-desoxyephedrine exceeded that of the patients.

4. *Insomnia.*—Dextro-desoxyephedrine produced the greatest degree of insomnia but dextro-amphetamine produced the effect most often particularly in normal subjects. These results were doubtless due to the increased length of action of the dextro-isomeric compounds. Because of the stimulation of motor activity, there is some indication that dextro-desoxyephedrine also combats physical fatigue to a greater degree than the other two compounds but that the after effects (let-down reaction) occurred more prominently when ten milligrams of this drug was administered.

5. *Euphorizing effect.*—Amphetamine produced euphoria most often and in greatest degree since all subjects manifested some elevation of mood and six of the persons who received this drug were definitely elated. Dextro-desoxyephedrine produced the least degree of euphoria and in fact seemed to stimulate the production of a state of increased irritation more often than elation. Seven of the subjects became very irritable after dextro-desoxyephedrine was administered. Dextro-amphetamine produced increased irritability more often than amphetamine did.

With regard to the subjective evaluation of the ability to perform a given task, it appeared that five of the eight normal subjects stated that they did mental work most efficiently when dextro-amphetamine was given. This was probably due to the fact that dextro-amphetamine, which acted for a longer period of time than amphetamine, neither produced the degree of distracting elation which the racemic compounds did, nor did it cause the occurrence of unpleasant irritability and the paradoxical effects which were observed subsequent to the ingestion of dextro-desoxyephedrine. However, amphetamine appeared to stimulate the volubility of half of the subjects to a greater degree than the other two amines, even though it acted for a shorter period of time.

The comparative effect of these three cephalotrophic substances on speech, efficiency and coordination requires further investigation.

6. *Untoward effects.*—After tabulating the untoward reactions following the administration of ten milligrams of each of these three allied compounds to each of sixteen subjects, it became apparent that dextro-desoxyephedrine produced the greatest degree of untoward effects most often. Only one subject failed to show any discomfort. In two of the subjects a marked toxic reaction accompanied by a short period of delirium was observed following dextro-desoxyephedrine, and in six subjects a moderate degree of untoward reaction was noted. Amphetamine caused the least degree of unpleasant reaction. Fewer untoward sequelæ (let-down reactions) and paradoxical effects occurred subsequent to administration of the racemic compound (amphetamine). Following the ingestion of dextro-amphetamine the untoward and paradoxical effects were greater than those observed after amphetamine had been given. Moderately unpleasant sequelæ were more apparent in three cases. However, the paradoxical effects and let-down reactions were less often produced and were not as pronounced as those observed subsequent to the administration of dextro-desoxyephedrine. For further information in regard to the type of untoward effect which maybe observed, the reader is referred to a previous communication regarding amphetamine (10).

7. *Effects on blood pressure and pulse.*—A summary of the action of ten milligrams of each three compounds on the vascular system of the sixteen subjects is of interest. Here again the degree of response to each of the three compounds varied with each individual observed.

With each drug, stimulation of the central nervous system occurred frequently without a concomitant rise in blood pressure. Elevation of blood pressure did not indicate the presence of a cephalotrophic effect. In some subjects a fall in blood pressure was observed soon after the onset of the action on the central nervous system. In a few instances, in the same subject, during a ten hour period of observation, an increase and decrease in the pulse rate and in the systolic or diastolic blood pressure was recorded after the administration of each of the three amines.

Dextro-amphetamine caused the greatest average rise in systolic blood pressure (13.6 millimeters of mercury). The average systolic rise after dextro-desoxyephedrine was 11.1 millimeters and after amphetamine 11.6 millimeters.

The racemic compound (amphetamine) caused the greatest average rise in the diastolic blood pressure (12.7 millimeters). The diastolic rise after dextro-amphetamine was 8.5 millimeters and after desoxyephedrine 9.9 millimeters.

During a ten hour period of observation, the greatest average fall in systolic blood pressure (7.4 millimeters) was noted after amphetamine was administered. The greatest average diastolic fall (5.7 millimeters) was noted after dextro-desoxyephedrine had been ingested.

Dextro-desoxyephedrine caused the greatest average increase in pulse rate (12.8) and the least average decrease (6.4). Dextro-amphetamine caused the greatest average decrease in pulse rate (9.5) and the least increase (8.6).

Discussion

From a theoretical viewpoint and as a result of animal experimentation (9) dextro-N-methyl amphetamine (dextro-desoxyephedrine) would appear to be the most potent central nervous system stimulant of the three substances used. The addition of a methyl group to the amine radical of the phenylethyl or propylamine sidechain is said to render that type of compound more cephalotrophic (5) and less sympathicotrophic. In regard to the increased cephalotrophic and lessened peripheral effect of the dextro-isomers the observations

of Prinzmetal and Alles (3), based in part on animal experimentation and on studies in a few human subjects, have been mentioned.

In general however, in the sixteen human subjects observed in this series, it may be said that the degree of cephalotrophic response produced by ten milligrams of each of these amines varied with each individual (5), as well as the specific phase of stimulating action studied. For instance, while one half of the patients were more euphoric after the administration of amphetamine sulfate and more restless after the administration of dextro-desoxyephedrine, three subjects were more restless after amphetamine and two were more euphoric after dextro-desoxyephedrine. Most of the subjects appeared to tolerate amphetamine best but four reacted more favorably to dextro-amphetamine. These variable effects may be partially due to the subjective nature of the recorded observations.

To some extent there was a difference noted in the reactions of the patients as compared with those of normal subjects. A somewhat more rapid average time of onset of effect was noted in the patients but the degree of cephalotrophic action produced by the two dextro compounds did not exceed that of amphetamine to the same extent as in normal persons. The average rise in systolic and diastolic blood pressure and the increase in the pulse rate was more marked in normals. With regard to the vascular as well as the cephalotrophic effects, it must be borne in mind that the patients were depressed and were therefore sedentary or in bed, while most normal subjects were up and about.

It is difficult to evaluate the relative potency of the three substances except to some extent in the phases which pertain to average rapidity of onset and average length of action. Using these criteria, when ten milligrams of each compound was employed, it would seem that dextro-desoxyephedrine possesses only a slightly greater cephalotrophic power than dextro-amphetamine but is about one and one-half times to twice as potent as amphetamine itself. However, dextro-desoxyephedrine produces the greatest degree of toxic reactions. Further studies are indicated for the purpose of comparing the effects of ten milligrams of amphetamine with smaller doses of the other two amines and determining the minimal effective doses of each compound are indicated.

Because of the relatively few cases in this series, the action on motor activity, mood and sleep are in need of further confirmation, particularly since many individual variations were observed in regard to the effects produced. Further study is also indicated with respect to thought processes and speech, efficiency and coordination, the effect on blood pressure and pulse and other peripheral manifestations.

Summary

After a superficial review of the tabulated data concerning the cephalotrophic action of ten milligrams of each of these three amines on the sixteen human subjects in this series, with reference to the specific phases mentioned, the following tentative statements may be made:

1. Dextro-desoxyephedrine produced the most rapid onset of effect, acted for the longest period of time and stimulated the greatest degree of motor activity most often. On the other hand, untoward effects and an emotional state of increased irritation were most likely to occur.

2. Amphetamine produced the slowest onset of effects and acted for the shortest period of time, but stimulated the greatest degree of euphoria and the least degree of untoward effects most often.

3. Dextro-amphetamine seemed to occupy an intermediary position between these two compounds. This dextrorotatory substance produced effects almost as rapidly and for almost as long a period of time as dextro-desoxyephedrine and its degree of action closely approximated that of dextro-desoxyephedrine. It did not stimulate as great a degree of motor activity as dextro-desoxyephedrine but appeared to exceed amphetamine in this respect. Untoward effects and emotional irritability occur more often with dextro-amphetamine than after the administration of amphetamine but less often than dextro-desoxyephedrine. While it did not stimulate the degree of euphoria which amphetamine did, it increased the subjective evaluation of the ability to do mental work in a majority of the normal persons in this series. It did not produce the degree of insomnia which dextro-desoxyephedrine did, but it caused its occurrence more often.

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Convulsive Shock Therapy in Mental Disease

In a preliminary report on the treatment of mental disorders by electrically induced convulsions, Erich Otten (*Illinois Med. Jour.*, May 1943) describes the method of treatment and presents the results obtained in one hundred cases. These cases included involution melancholia and various types of manic depressive psychoses, dementia precox and psychoneuroses. The results showed that eighteen patients recovered, thirty-eight were improved, fifteen were institutionally improved, and twenty-nine remained unchanged. The author concludes that this form of therapy is of great value in involutional melancholia, is almost as good in the manic depressive psychoses of the depressive type, and fairly satisfactory in the manic type of the manic depressive psychoses. The treatment may be helpful in early schizophrenia, but psychoneurotics are not benefitted, unless it is part of a course of psychotherapy.

Editorials

Tuberculosis

There has been considerable talk about the possibility of a postwar epidemic of infectious diseases. Some far-sighted medical men have warned about the likelihood of our men, who are fighting on fronts in various parts of the world, bringing back to this country various tropical diseases and other diseases which are not currently endemic here. We can expect an increase in the incidence of tuberculosis both today in various occupied countries and tomorrow throughout the world. There are various factors which will undoubtedly bring about this increase with an almost predictable statistical regularity.

Dr. Charles M. Hendricks, writing in *Diseases of the Chest,* 9:3 (May-June) 1943, brings out some rather startling and grim points that should be brought to the attention of medical men and those interested in the health and welfare of the people of our nation as well as the wellbeing of peoples throughout the world. He states bluntly that tuberculosis has always been a camp follower of war. He then shows that following the war of 1914 there was an increase in deaths from tuberculosis in German occupied areas of France from 3.3 per 1,000 prior to the war, to 5.75 per 1,000 in the years of occupation from 1916-17. He goes on to show that tuberculosis increased in all countries, including our own, during the first world war, and points out that today the situation is far more grave. In the occupied countries today most of the food produced has been taken by the Nazis, and labor has been enslaved. Concentration camps, broken homes and indescribable living conditions foreshadow a marked increase in tuberculosis.

In Belgium tuberculosis among children has increased eighty percent and is spreading rapidly. Sixteen thousand new cases were reported in four months and it is believed that conditions are even worse in Poland and Greece. Dr. Hendricks proposes a plan for a U. S. Military Tuberculosis Commission. The plan he suggests, which we cannot quote in detail, is well thought out and valid. However, this will only cover the rôle that may be played by our forces in occupied countries, but we sincerely believe that further steps should be taken in our own country for the benefit of our own citizens.

In many areas we have an extremely unnatural situation due to crowded quarters in certain defense works areas. The workers are under a strain due to their having taken up new occupations. There has been a great shift from suburban to urban areas, and there are many other factors too self-evident to be mentioned which will undoubtedly increase the incidence of tuberculosis.

We are not so fearful about the men in the Army being affected for they receive the best of food and constant medical supervision. Most of the men are in better shape and are healthier than they would be in civilian life, but does the civilian population fare as well? Are we assuming the same responsibility and care for the men in the munition plants, in shipyards, in mines, and on the farms, or are we permitting the thing to work itself out in a haphazard fashion? We believe that more should and could be done to prevent the most dreaded and the most controllable disease to gain a firm foothold in this country.

Freedom To Eat Well

On one occasion Vice-President Wallace half facetiously remarked that we were fighting this war to see that all who needed it got a quart of milk a day. He was later so kidded by reactionaries regarding the statement that he half explained it away, but it is basically true nevertheless. For sound global nutrition is basic to any semi-permanent world equilibrium.

Few of us seem to realize that for many years now at least two-thirds of the world's people have subsisted regularly on inadequate diets. The small men of Asia have eaten an average of 2,600 calories a day, along with biologically inferior proteins, while the taller Europeans and Americans averaged 4,000 calories daily at best, along with good meat proteins. No world society based on such fundamental inequalities could or should ever be stabilized.

If the world were fully fed it would have to produce one and a half times as much cereal as it ever produced, twice as much fish and poultry, one and a quarter times as much vegetable fat and oil, and three times as much fruits and vegetables. Here is plenty of work for many busy hands. At least three-quarters of all Asiatics regularly have diets below what would be regarded as adequate in Europe and the United States, yet in most cases eighty-five percent of the Asiatic family incomes goes for food.

Minimum decent living standards for a family of five in India would require a cash income of at least sixty-eight dollars a year. But Indian tenant farmers average only twenty-seven dollars of which fifteen dollars is represented by production for home use. Indian owner-operator farmers average only forty-five dollars a year, of which twenty-three dollars represents production for home use. In most of Africa and the Pacific Islands animal proteins are a luxury. In China there never has been anything like enough food.

In 1936 only twenty-seven percent of the families in the opulent United States had good diets, thirty-eight percent had fair, and thirty-five percent had poor. Sir John Orr says that to feed all in the United Kingdom well would require one hundred and twenty-four percent more fruit, eighty-seven percent more vegetables, eighty

percent more milk, fifty-five percent more eggs, and thirty percent more meat than they ever before have consumed.

In socalled well-fed countries like the United States, the United Kingdom, Sweden, New Zealand, Australia, and Switzerland, it has been the custom to derive only thirty to forty percent of the calories in the diet from cereals. But in Asia, Africa, Poland, Bulgaria, Yugoslavia, and Rumania from seventy to ninety percent of the calories came from cereals.

Even under strict rationing, with prices pegged by an annual subsidy of six hundred million dollars to the food industry, the consumption of low-income groups in the United Kingdom is limited by their purchasing power. Whenever the butter or sugar rations exceed two ounces weekly many people cannot afford to buy as much of these foods as their ration cards would permit.

Obviously a world-wide survey should be undertaken to ascertain, first, the nutritional requirements of all peoples, and secondly, the best methods of fulfilling their requirements. Food consumption should be limited by nutritive needs, not by purchasing power, in industrial societies which cannot guarantee security of income.

Food has political aspects today also. The Germans have discovered that they can use food as an instrument of political policy, starving those they wish to keep submissive. But it is also true that deprivation of the essential vitamin B complex causes people not only to lack energy and stamina, but to become irritable and noncooperative. Underfed people become quarrelsome. They develop the very characteristics which perpetuate wars.

Proper global nutrition is, therefore, fundamental to the achievement of all other freedoms. Many other good things would follow automatically in its wake. But if anything like this is undertaken the United States must assume much of the burden. We not only have power, we also have food-production capacity in almost unlimited abundance once we choose to implement it and operate it functionally.

Germany's Medical Situation

Immediately after Hitler came to power, medical cultists and practicing laymen had the time of their lives. They were recognized and allowed to practice; their authority was particularly favored by Hitler's first aide, Rudolf Hess, now in England. Slowly the influence of these lay practitioners diminished during the following years, and the cultists experienced some setbacks, in contrast to the many promises given them during the period of Hitler's coming to power.

Now, however, due to the shortage of doctors in Germany because of the war, lay practitioners, who formerly were not recognized as trained in the science of medicine, have been allowed to practice in large numbers. This we learn from a report by Howard D. Fishburn, of the U. S. Public Health Service, who, up to December 1941, was assigned to the United States Embassy in Berlin, his duties involving considerable travel in Germany and other parts of Europe. Later he was interned at Bad Nauheim. The recognition by the government of these untrained laymen as medical practitioners has lowered medical standards. The few remaining overworked doctors in private practice are under a great strain. Dr. Fishburn was told by a heart specialist at Bad Nauheim that a high percentage of his patients were doctors, indicating that men left in civilian practice were "cracking up" under the strain.

To overcome the shortage in medical personnel, the course in medical education has been shortened by about a year and a half. Enrollment has been increased in the medical schools by running two shifts. The return of sick and wounded men from Russia and North Africa threw a tremendous burden upon the hospitals. As a result of the bed shortage, the sanatoria and chronic disease hospitals have been emptied of their tuberculosis and cancer patients and their nonviolent psychotics. These evacuated patients have been dumped back into civilian communities and required to work in war industries whenever possible.

According to a report of "Deutsches Nachrichten Büro", the health office of Deutsche Arbeitsfront and the Association of German Panel Doctors have arranged for the district doctors to hold consulting hours in armament factories, supplementing the medical service provided by the works themselves. Thus, armament workers will be able to undergo medical treatment in the works without having to waste time by going to the doctor's private office. Loss of working hours and output will thus be avoided.

Little could be learned by Dr. Fishburn about reserve supplies of essential medical and surgical materials for the German armed forces, but the supply available to civilian practice had passed the stage of scarcity and reached the stage of inadequacy. Such imported items as iodine, quinine, castor oil, and petroleum products, available only in limited quantities before the war, were shortly thereafter nonexistent in civilian practice. Ointments were being compounded with a nonfatty base and, on the whole, had little clinical value. Narcotics, sedatives, and cathartics, especially, were available only in small quantities. Most surgical dressings consisted of a cellulose material resembling our "facial tissues", with one layer of gauze as an outside covering to hold the bandage in place. Cotton was very scarce. Limited supplies of surgical instruments were obtainable in large cities, but their manufacture was discontinued, except for items in everyday use, such as hypodermic syringes. The quality and workmanship of these were poor—a striking contrast to their quality in pre-Hitler times.

The Overworked Doctor

We know of no profession which in socalled normal times demands such a heavy toll from its members as does medicine. Today the situation is infinitely worse. In former days the average physician was working at a steady clip. With approximately thirty percent or more of the practicing physicians in the service, the additional load thrown on those remaining in civilian practice is heavier than the figures would indicate.

In addition to the actual medical work that the doctor is called upon to do, he is pestered by demands from his patients for notes to ration boards for additional fuel oil, special foodstuffs, and other requirements which call for statements from physicians. There are more persons to treat on account of the increased tension under which we are living, on account of the poor housing facilities in many sections, on account of the additional injuries and illnesses caused by the stepped-up tempo of production which has called millions of workers into fields previously unfamiliar to them.

The Army has taken a great many of the younger and more energetic men, and the burden falls in a great part on the older physicians who are left in practice. It is true that there is more self-medication today because medical care is at a premium, but this does not lessen the doctor's burdens. When a patient treats himself, instead of going to see a doctor, it not infrequently happens that serious complications develop which require radical surgical or medical treatment, when simple therapy would have taken care of the initial ailment if seen early. This strain on physicians does not permit them to keep abreast of the literature as they should. It is almost impossible to attend scientific meetings for time is not available, and a great many meetings have been cancelled. Transportation difficulties are real and add to the hardship of attending.

We do not see any immediate remedy for all these problems and perhaps some of our readers may say, why talk about them? Of course, from a long range point of view we should vastly increase the attendance at our medical schools but here, too, there are handicaps due to the loss of teaching personnel, inadequate facilities for handling larger groups, and other problems. Nevertheless, our population must be protected and taken care of in illness and injury and we should avoid getting into the sad state that confronts our enemies in Central Europe where medical care is in a rather deplorable condition.

We must not forget, too, that when the soldiers return there will be many who will require care, and they will undoubtedly bring new diseases and new problems. We are confronted with a serious situation, not alone from the point of view of the physician but from the larger point of view of the health of our nation.

News Items

Personal.—Dr. William V. P. Garretson, New York, has recently been appointed consulting neurologist, psychiatrist and endocrinologist to St. Clare's Hospital, New York.

Dr. William Seaman Bainbridge was reelected international treasurer, national regent for malignant disease, and chairman of the board of trustees of the International College of Surgeons, at the fourth international assembly held in New York recently.

Dr. Frederick MacCordy, professor of hospital administration, Columbia University, and director of the Vanderbilt Clinic of the Columbia-Presbyterian Medical Center, has been appointed state commissioner of mental hygiene, succeeding Dr. H. Beckett Lang, who has been acting commissioner since the resignation of Dr. William J. Tiffany.

Brigadier General James Stevens Simmons, director of the Preventive Medicine Division, Office of the Surgeon General, U. S. Army, received the honorary degree of doctor of science at the Duke University commencement exercises held on May 22d.

Dr. David R. Lyman, medical superintendent of the Gaylord Farm Sanatorium, Wallingford, Conn., was presented with the Trudeau Medal for 1943 of the National Tuberculosis Association, at the annual meeting held last May.

Dr. Hugh Cabot, Boston, has been elected a member of the board of directors of Russian War Relief. Dr. Cabot has been chairman of the Massachusetts Committee of Russian War Relief since its inception in November 1941.

Dr. C. P. Rhoads, director of the Memorial Hospital for the Treatment of Cancer and Allied Diseases, New York, has been granted leave of absence to become chief of the Medical Division of the Chemical Warfare Service of the United States Army, with the rank of colonel. Dr. F. W. Stewart, pathologist at the hospital, will serve as acting director during the absence of Dr. Rhoads, with Dr. Howard Taylor, attending surgeon of the gynecological service, as his assistant.

Dr. Carl Voegtlin has retired as chief of the United States Public Health Service's National Institute of Health at Bethesda, Md. Dr. R. Spencer, assistant chief of the Institute, will assume the directorship on July 31st.

Dr. Charles F. Bolduan has retired as director of the Bureau of Health Education of the New York City Department of Health.

Brigadier General Norman Thomas Kirk has been appointed Surgeon General of the United States Army, succeeding Major General James C. Magee, whose term of office expired on May 31st.

Dr. Elliott P. Joslin, emeritus professor of medicine at Harvard Medical School, has received the Distinguished Service Medal and Award of the American Medical Association for 1943.

Dr. Frank H. Lahey, of Boston, chairman of the directing board of the Procurement and Assignment Service for Medical Personnel of the Armed Forces, was given the degree of doctor of science at the annual commencement exercises held at Boston University on May 24th.

Dr. Strecker Named Consultant in Psychiatry to War Department.—Dr. Edward A. Strecker, of Philadelphia, professor and head of the department of psychiatry at the University of Pennsylvania's Graduate School of Medicine, has been appointed special consultant in psychiatry to the Secretary of War for the Air Forces of the United States Army. Dr. Strecker was recently named consultant in psychiatry to the Surgeon General of the Navy, in which capacity he acts as advisor in psychiatry to the Bureau of Medicine and Surgery of the Navy. Serving as a civilian advisor Dr. Strecker will be on call at all times by the War Department.

New A.M.A. Officers.—At the annual meeting of the House of Delegates of the American Medical Association, held in Chicago, on June 9th, Dr. James E. Paullin, of Atlanta, Ga., was installed as president, and Dr. Herman L. Kretschmer, of Chicago, was named president-elect. Dr. John J. Amesse, of Denver, was elected vice-president, and Dr. Josiah J. Moore, of Chicago, was elected treasurer, to succeed Dr. Kretschmer.

Death Rate from Accidents.—The mortality from all accidents was about seven percent lower in 1942 than in 1941. This includes automobile accidents, and for these alone the rate declined almost thirty percent. This decrease was anticipated, since rationing of gasoline and tires was in effect for a considerable part of the year. Concerning other accidents the death rate for 1942 was higher than in any of the five preceding years.

Increased Birth Rate.—According to *Public Health Reports,* the birth rate in the United States during the year 1942 was relatively high—19.5 per one thousand total population. With the exception of a slight drop in 1939, the birth rate has increased in every year since 1936. The rate for 1942 represents an increase of approximately seventeen percent since 1936. Thirty-two of the thirty-three States reporting on births had higher rates in 1942 than in 1941. The greatest increases occurred in the South and Southwest.

Association of Military Surgeons.—The fifty-first annual meeting of the Association of Military Surgeons of the United States will be held in Philadelphia, October 21st to 23d, with headquarters at the Bellevue-Stratford Hotel. The program will consist of forum lectures, practical demonstrations, moving pictures and teaching panels which have been planned to present a wealth of material brought to the convention by doctors from all the great war fronts where the United States forces are fighting, and from the great base hospitals where rehabilitation of the wounded is in progress. Honorary chairman of the convention is Rear Admiral Ross T. McIntire, Surgeon General of the Navy and the general chairman is Captain Joseph A. Biello, Medical Corps, U. S. Navy, district medical officer of the Fourth Naval District. The officers of the association are: President, Captain William L. Mann, Medical Corps, U. S. Navy, National Naval Medical Center, Bethesda, Md.; first vice-president, Colonel Lucius A. Salisbury, Medical Corps, New York National Guard; second vice-president, Assistant Surgeon General Warren F. Draper, U. S. Public Health Service; third vice-president, Colonel Edgar Erskine Hume, Medical Corps, U. S. Army; fourth vice-president, Colonel Irvin Abell, Medical Reserve, U. S. Army; fifth vice-president, Dr. Martin L. Cooley, Veteran's Administration; secretary, Colonel James M. Phalen, U. S. Army (ret.), and executive secretary, Stuart E Nomeldorph.

European Association of Clinical Pathologists.—The European Association of Clinical Pathologists was inaugurated at a meeting held in the Medical School of University College Hospital, London, on April 3rd, according to the *British Medical Journal.* Between twenty and thirty medical men and women drawn from Austria, Belgium, Czechoslovakia, France, Germany, Great Britain, Hungary, Italy, Poland, and Russia were present. Dr. S. C. Dyke, former secretary and president of the British Association of Clinical Pathologists, presided and explained how clinical pathology was organized in Britain. A committee consisting of Dr. B. L. Della Vida (Rome); Dr. S. C. Dyke (Oxford); Dr. M. Mandelbaum (Munich); Dr. F. Pick (Prague); Dr. F. Silberstein (Vienna), and Dr. J. Ungar (Prague) was appointed to draw up rules which were to be submitted at a subsequent meeting. Dr. F. Pick, of Prague, was appointed secretary.

Missouri State Medical Association.—The eighty-sixth annual meeting of the Missouri State Medical Association was held in St. Louis, April 18th, 19th, and 20th, under the presidency of Dr. H. L. Kerr, of Crane, Mo. Dr. A. W. McAlester, Jr., of Kansas City, was installed as president and Lieutenant Colonel Curtis H. Lohr, of St. Louis, was unanimously elected president-elect. Other officers elected were Dr. Dudley A. Robnett, of Columbia, Dr. Buford G. Hamilton, of Kansas City, and Dr. J. I. Byrne, of St. Joseph, vice-presidents; Dr. R. L. Thompson, of St. Louis, secretary-editor; Dr. E. C. Hyndman, of St. Louis, treasurer. At a banquet held on Sunday evening preceding the meeting, Dr. H. L. Kerr, of Crane, presided and the guests included Dr. Morris Fishbein, of Chicago, and several past presidents of the Association. The 1944 meeting will be held in Kansas City.

Examinations of Board of Obstetrics and Gynecology.—Applications for the 1944 examinations of the American Board of Obstetrics and Gynecology, Inc., are being received at the Office of the secretary, Dr. Paul Titus, 1015 Highland Building, Pittsburgh, Pa. Booklets of information regarding board requirements and examinations, together with application forms will be sent upon request. All applications for the year 1944 must be in the secretary's office not later than November 15, 1943, ninety days in advance of the Part I examination date.

Candidates are required to take both the Part I and Part II examinations. The Part I examination consists of the written paper and the submission of twenty-five case history abstracts, and will be conducted on Saturday, February 12, 1944. This examination will be arranged so that the candidate may take it at or near his place of residence. Upon the successful completion of the Part I examination, candidates are eligible for the Part II examination consisting of a pathology and an oral examination.

The Office of the Surgeon General, U. S. Army, has issued instructions that men in the service, eligible for board examinations be encouraged to apply and that they request orders to "detached duty" for the purpose of taking the examinations whenever possible.

AT WHAT AGE SHOULD THE LAMP GO OUT?

ANTHONY BASSLER
New York, N. Y.

Are we sufficiently well off with the present span of life of approximately sixty-two years? Should the "three score and ten" of the Bible be accepted as a standard? Or should the scientific as well as the Bible standard of one hundred years be the goal? Is not our old age of today only that of middle age? One thing is sure, the many deaths of prominent men in the late forties and fifties are far too early. Why?

In the Book of Isaiah, chapter 65, verse 20, it is stated: "There shall be no more thence an infant of days, nor an old man that hath not filled up his days: for the child shall die an hundred years old; but the sinner being an hundred years old shall be accursed". The author of Ecclesiasticus (18:8) gives one hundred years as the limit of life. Coming down to more recent times, careful comparative, anatomical and physiological studies of all animals have proved conclusively that the length of life of man is one hundred years. We all have met people who are in the nineties, and almost daily the newspapers record the death of someone over one hundred years of age. Yet with this before us, and especially the reasoning of Dr. Wilson, the clergy and many lay people continue to give lip service to the ninetieth Psalm, verse 10, in which it states, "The days of our years are three score years and ten; and if by reason of strength they be fourscore years, yet is their strength labor and sorrow."

The question as to which is correct is interesting, but what is even more interesting is that even with the marked increase in the span of life (thirty-nine years in 1850 to fifty-nine years in 1930 and about sixty-one years now) we are still lamentably short. Estimated on an accrual basis from past statistics, only eleven or twelve percent of our population will live to be between fifty and sixty-four years of age, and this means that one out of ten persons living today in this land of plenty will pass away in the early autumn of life. Why is it that approximately ninety percent of our people today will not live beyond middle life? This is one of the big questions calling for an answer.

The control of mortality in the early years of the span of life has been tremendously heightened by the advances made in pediatrics, and among those whose praises have been sung for their accomplishments in this field due credit has not been given to Rotch, of Boston, who first advanced the proper method of feeding infants artificially. Added to this are those who worked in the early days of antitoxin, the insistence of early vaccination against smallpox and the biological handling of scarlet fever, who have been lost sight of in prolonging the span of life. When an adult lives to eighty years of age and an infant dies in its first year, the average span of life for the two is forty years.

The longer the parents live (excluding dramatic accidents and occupational diseases causing death) the surer is the legacy of a long life in their offspring. Here we deal with hereditary factors and especially those of a biological nature in the body structures which operate in natural or passable immunities against acquiring infections or baneful allergic conditions. These cannot be estimated in large part, and probably never will be to a practical degree. The emotions of love consummating in family establishments mate the weak with the strong and often the weak with the weak, causing issue of poor human material fundamentally. Few of us are as concerned about eugenics for ourselves as we are about the animals we mate together. Many know the rules and natural laws for animals, but feel they are not important to us. We are too egotistic, too independent and emotional to believe that these laws should be applied to us. Yet the way to live long is, to a considerable degree, to "pick long-living parents" for ourselves. If the unborn child could talk, what he would say would be unpleasant to many and would make the far too late and puerile efforts of man, as is now seen in Germany, look ridiculous and absurd.

There is no yardstick to measure what shortening effects habits and improper custom have on longevity. The young who drink spirituous liquors surely poison and damage the tissue cells of their bodies and shorten their days. On the other hand, when the cells are set by years of normal function and the inevitable deposition of connective cell tissue takes place, a little alcohol in the body in addition to that which is physiologically present prolongs life and prevents deterioration of the cardiovascular-renal system as well as improving general metabolism and keeping normal the tissues of the hepatobiliary system. In those who have taken to the moderate drinking of alcohol in middle life there is less cholesterol effect on the middle coats of the arteries, thus less arteriosclerosis, and likewise, there is less disease in the biliary system (gallstones, etc.), by at least three-fourths. The elder Janeway, with whom I was associated for years, used to say, "He who drinks whiskey and such when young is a fool, but he who does not drink moderately of it at middle age and after is a double fool". Postmortem observations and clinical experience prove this distinctly. Of course, inordinate drinking is baneful at all ages. Smoking moderately is certainly not conducive to the development of any disease that would shorten one's days. More harm to the sensitive nervous ganglia of the heart comes from coffee than from tobacco. Naturally, here again the excessive use of tobacco and coffee, as well as tea, would disturb normal functions and if kept up long enough, might possibly bring on disease, especially if an allergy to them exists.

The manual worker is distinctly less likely to make "old bones" than those less physically employed. The athletic youth stands physical exercise and training well, yet must keep at it for years afterward to prevent flabbiness of the muscles, especially the myocardium. But physical exercise of strenuous types is unwise for the average man. Once engaged in intemperately the victim must continue it to keep in even fair shape. Moderate exercise in the form of a few minutes of "setting up" exercises, or walking two or three miles a day, is all that is necessary for the middle-aged and older person. Much of the literature of physical health institutions is on the propaganda order. Women live longer than men and they do not patronize these places. The man who drops dead on a golf course, like the per-

son who dies of "acute indigestion", dies from a severe pathological condition the presence of which is generally unknown to him. Normal indulgence in sex conjugations is equalizing to the nervous system and a prophylaxis against prostatic enlargements; excessively engaged in it is unstabilizing and depleting to the nervous system.

The rule of nonexcess in all things is essential. As we grow older we should eat less food, and the aged should tend to get back to first principles in food selections. The best way to take vitamins is to eat natural foods that contain them. This is far better than to take the extracted and synthetic forms and would also save the American public ten million dollars annually. More than two-thirds of our people are subsisting on subnutritional diets and this is a real maker of degenerative diseases.

The living of a normal psychological life is essential to longevity. Worry, grief, anxiety, suspense and stress disturb the balance of the sympathetic nervous system and bring on functional disorders in essential organs which may eventually become pathological. Continued states of unhappiness, the giving in to a bad disposition, lack of adjustment by a reasonable philosophy, worrying about past losses and what may happen tomorrow which probably never occurs, a tendency to drift into anxiety and to have the inevitable stresses of life bring on agitation, not only cloud our days but shorten them as well. The incidents and the regularity of married life are healthy stabilizers and help us to carry on longer. In this situation the regular routine of dividing the days into thirds, one each for work, relaxation, and sleep, is easily accomplished. Nothing is more conducive to long life than a regular routine day after day. One of the greatest forces of life is rhythm. This is the great law of the universe and we should copy nature in the things that we do.

Advance has still to be made in the cause and cure of malignant disease in which two-thirds of the fatal cases are due to immoderate delay on the part of the public and one-third to the flagrancy of high pressure salesmanship, through the radio and the press, by manufacturers of proprietary drugs in order to induce the public to treat themselves. Advances must also be made in knowledge pertaining to peptic ulcer, the specific treatment of tuberculosis, disorders of the urinary system, occupational diseases, etc. These will come in time. The puerperal mortality since 1930 has been remarkably reduced, that of acute appendicitis is decreasing, yet that from motor vehicle accidents in our big cities is as high as from one-third to one-half of the total deaths. This last is unfortunate, especially as it takes a heavy toll among young adults. It would seem here that better policing methods of control of both drivers and pedestrians are most important.

The incidence of infections and acute inflammatory conditions are also important factors in the mortality rate. The advances made in diagnosis and treatment and all that they imply are steadily progressing and thus prolonging the average length of life. Surgery and anesthesia in both young and old have improved immensely. The crying need today is for a better understanding and means of handling the virus infections. More knowledge of the atypical forms of rheumatism, especially in the young, would decrease the mounting incidence of cardiac deaths, but these, even including the second well known cause of heart disorders, syphilis, are no where near as important as the subtle toxic and catabolic causes of artery, kidney and cardiac diseases.

Geriatrics, so glibly talked and written about, is merely the question of a wise and capable physician. Fundamentally, as a department of medicine, it lacks a scientific basis and fails to reach into the causes of degenerative conditions, their prevention and proper handling. Considering the skin and the anal opening as of minor importance, the invasion avenues into the body from without are the respiratory and the digestive tracts, the digestive tract being of major importance. When the profession develops or broadens sufficiently to understand the biotoxic intestinal states, their effects upon the human economy in the production of pathology as age advances, and handles them scientifically instead of from the viewpoint of a pharmaceutical house circular, a tremendous advance in lengthening the span of life will have been accomplished. Debate, lack of knowledge, and ignorant fixity of opinion are holding back proper medical advance on this subject and make for shortening the span of life. All the really old people I have seen always have a nontoxic and normal digestive system, with a normal assimilative and eliminative process in addition. Very largely we live as long as the biology in our intestinal canals permits.

Just as automobile deaths must be lessened, so will those due to war have to be controlled. In a world properly conditioned for peace, the politicomilitary aggressors would be stopped the moment they started. The higher order of man should be beyond a selfish and limited nationalism, whatever the country. Whether you call it God or the laws of Nature (which are the same thing), the taking of human life for the reasons that have been so far advanced can never square with the purposes for which God put us on earth. In war, man makes a mockery of his spirituality and religion, even in the socalled religious wars of the past. If wars must be, one should fight and be willing to sacrifice and suffer, nor should one be a conscientious objector to wars when they occur; but in the higher purpose of man they should not be allowed to occur. The prevention of wars, by whatever means that are required, would conduce to longevity and the best in life for each of us. For over one hundred years the peoples of this earth have been nationally minded. If we had been internationally minded instead, the slaughter of youth that is going on today probably would not have occurred. A better means to preserve peace than by war will one day have to be found. The best in vision today is a union of the English speaking peoples of the world to police it in an honest and fearless way until this is accomplished.

Here, then, are a few matters that the baby points to toward its future. Since life should be sweet to all of us, it should be sufficiently long so that enough happiness may be had for each of us. We cannot control our congenital deficiencies, but we can control many of the events that happen. Pathology is merely a reaction in tissue to a destructive agent. While in most of us our lamp will go out long before it has burned one hundred years, it should not go out with most of us as early as it does. When it does, there is a real human failure somewhere along the line.

121 EAST SEVENTY-FIRST STREET

Book Reviews

Pathology

Human Pathology. By HOWARD T. KARSNER, M.D., professor of pathology, Western Reserve University, Cleveland, Ohio. With 460 illustrations in black and white and twenty-four subjects in color on sixteen plates. Sixth edition, completely revised and reset. Philadelphia, Montreal, and London: J. B. Lippincott Company, 1942. Pp. 817. Price $10.00.

A textbook of pathology should not be a mere catalogue of morbid anatomy. A knowledge of morphological change is fundamental to a comprehension of the subject, but must be expanded by a coordination of the physiological and biochemical implications of altered structure. Furthermore, the functional disturbances should be interpreted in terms of clinical manifestations. To this end, disease and its effects in the living patient have been correlated as closely as is consistent with the primary objectives of the book. In the chapters on systemic pathology, the subject of endocarditis has been reorientated, that of anemias has been rearranged in accord with current conceptions of hematology, the modern views of pneumonia and pneumonitis have been included, cirrhosis of the liver is presented in the light of the newer studies of dietary alterations, and pyelonephritis is discussed with appropriate attention to its functional significance. Tumors of the gonads are now discussed in relation to their associated endocrine disturbances. The chapter on ductless glands has been brought into line with prevailing views on endocrinology, with especial reference to tumors of these organs. The material on tumors of bones and of synovia has been rewritten. The chapter on the nervous system has been modernized, especially in reference to viral diseases. Many other changes have been made throughout the book.

The Kenny Treatment

The Kenny Concept of Infantile Paralysis and Its Treatment. By JOHN F. POHL, M.D., clinical assistant professor of orthopedic surgery, University of Minnesota. In collaboration with SISTER ELIZABETH KENNY, honorary director of the Elizabeth Kenny Clinics of Australia; honorary director of the Elizabeth Kenny Institute, Minneapolis; guest instructor, University of Minnesota Medical School. With a foreword by Frank R. Ober, M.D., president, The American Orthopedic Association. St. Paul, Minn.: Bruce Publishing Company, 1943. Pp. 366. Price $5.00.

This volume on infantile paralysis is an up-to-date discussion of the techniques now being advocated by Sister Elizabeth Kenny. The reader will find a well conceived plan for the relief of pain and muscle spasm by the early and continued use of hot packs and a well-defined plan for re-education of the neuromuscular system. The idea of moist heat is not new since one will find in the writings of Lovett and his coworkers that hot packs were advocated and used in 1916, and were found to relieve the deep pain and tenderness that is associated so often with this disease. However, they were used only two or three times a day and for one-half hour periods, and the patients were not seen until after the quarantine period. The method for the application of hot packs as used by Sister Kenny begins when the diagnosis is made, and the packs are applied, as described in the book, for the relief of muscle spasm. There is no doubt in my mind that by this method the pain disappears more quickly than by any other and stiffness is avoided. Sister Kenny puts great emphasis on muscle spasm in the affected muscles. One does not find mention of muscle spasm in textbooks, but there is no doubt that it is present and is a great factor in the production of early deformities unless relieved. Mental alienation of muscles is another term used in the book, and does occur even in other conditions in which there is no paralysis. Braces and splints are not used to prevent early deformities since they make extremities stiff and increase muscle spasm. If the Kenny technique, with its continuous superb nursing, is followed, the physician will find that the affected parts become soft and relaxed, limitation of motion is not so persistent, and pain subsides remarkably early as compared to other methods. The physical therapist will find that close application of the technique described in the book will gain the maximum amount of recovery more quickly and much more satisfactorily than by the techniques previously employed. This book should be perused and used by all interested in the welfare of those who are afflicted with poliomyelitis.

Surgical Nursing

Textbook of Surgical Nursing. By WILLIAM F. MACFEE, A.B., M.D., F.A.C.S., associate professor of clinical surgery, Cornell University Medical College, and attending surgeon, New York Hospital; and MANELVA WYLIE KELLER, B.S., R.N., formerly chief operating room nurse, St. Luke's Hospital, New York. Fourth edition, illustrated with 186 illustrations. New York: The Macmillan Company, 1942. Pp. 559. Price $3.50.

It is the purpose of this book to acquaint the nurse with the "facts" concerning disease so that she may give the most intelligent service of which she is capable. A larger purpose is to recognize complications in the doctor's absence and to report them promptly. A chapter has been added on the cardiovascular system, and data concerning the sulfa drugs in infections, the use of blood plasma in transfusions, and the treatment of certain gastrointestinal conditions by means of a retained suction tube, are well set forth.

At the end of each chapter there are "Questions for Review." These are very helpful for consultation or "refresher" study. The diagrams and cuts are excellent and serve to elucidate the text fully.

The publishers have done an excellent piece of bookmaking. Both paper and print are of the best quality, and the cost has been kept to a limit which will strain nobody's pursestrings.

Vitamins

The Biological Action of the Vitamins. A symposium. Edited by E. A. EVANS, JR., associate professor of biochemistry, University of Chicago. Chicago: University of Chicago Press, 1942. Pp. 227. Price $3.00.

The papers gathered in this volume throw considerable light on what constitutes optimal human nutrition, the goal of all experimental and clinical studies in nutrition. It no longer suffices to be content with the remarkable therapeutic value of vitamins in such gross pathological conditions as scurvy, beriberi and pellegra, for these very diseases have thrown considerable light on the underlying metabolic mechanisms taking place within the cell itself. Indeed, studies of the growth requirements of bacteria, examination of the nature of cellular respiration, clinical studies of latent human nutritional deficiency have all been solved through the agency of vitamins as the common denominator. The

old order of studying tissues histologically for recognition of vitamin deficiency has now given way to biochemical methods for elucidating the exact mechanisms of vitamin activity. Studies of structures are being displaced by studies of function as reflected by the papers embodied in this monograph: The biological action of the vitamins: cocarboxylase; vitamin B_1; human riboflavin deficiency; the story of pellagra and its treatment with nicotinic acid; pyridoxine; pantothenic acid and the microbiological approach to the study of vitamins; biotin; choline; the economy of phosphorus in the animal organism; vitamin K.

Child Psychology

Psychology of the Child. Mental and physical growth. By JOSEPH WILLIAM NAGGE, Ph.D., associate professor of psychology, Kansas State Teachers College of Emporia. New York: The Ronald Press Company, 1942. Pp. 530. Price $3.25.

In this book on general child psychology the author has attempted to present an up-to-date survey representative of the present status of child study. No particular systematic emphasis has been placed on the experimental data, since such a treatment would necessarily be obliged, from the logical point of view, to deal with topics of little interest to the reader and to exclude, in some cases, contributions which seem significant. Hence, the treatment has been more or less eclectic. The data presented include many of the most recent and significant objective studies which have appeared in the literature concerning the physiological and psychological study of the child. Many of the earlier monumental studies have been included both for the excellence and clarity of their contributions, as well as for their value as historical material, an appreciation of which is essential to the attainment of a better perspective of the source materials which later came to inspire signficant research. The book is helpful to the pediatrician in evaluating normal behavior at various age levels.

Vision

The Sight Saver. By C. J. GERLING. New York: Harvest House, 1943. Pp. 202. Price $2.00.

Mr. Gerling is one of that numerous group of laymen who have a flair for simplifying scientific subjects so that the man in the street may secure dependable information on subjects which are otherwise esoteric.

In his introduction, Dr. Winfield Scott Pugh, U.S. Navy Medical Corps, retired, says that Gerling's approach to sight conservation is multidimensional, for he covers optics, the field of general ophthalmology, the evils of eye nostrums and quackery, the basic principles of illumination—in short, everything is mentioned in this book having anything to do with vision.

The book may be considered an epitomized encyclopedia of vision and its attendant subjects. The various topics are arranged in alphabetical order, beginning with "accommodation" and ending with "the yellow spot on the retina".

If one wishes to know something of myopia, he finds the answer on page 126 under near-sightedness which is "a refractive defect of the eye . . . a result of malformation of the eyeball which makes it longer than normal from front to back." This is simple language and it is expanded in the paragraphs which follow so that one readily comprehends what the oculist tries to do when prescribing lenses to alleviate the defect.

Accuracy seems to this reviewer to be well preserved throughout the book, and inaccuracy is too often found in a text of this sort. Here is a simple, thoroughly readable little volume which may be enjoyed by anyone who can understand common everyday English.

Pediatrics

The 1942 Year Book of Pediatrics. Edited by ISAAC A. ABT, D.Sc., M.D., professor of pediatrics, Northwestern University Medical School; with the collaboration of ARTHUR F. ABT, B.S., M.D., associate professor of pediatrics. Chicago: Year Book Publishers, Inc., 1943. Pp. 512. Price $3.00.

This volume follows the usual pattern of the Year Books, being subdivided into advances in the mechanism and management of various systemic diseases occurring at all ages of children from birth to maturity. Some diseases, such as tuberculosis, syphilis, rheumatism, are given the prominence that has been accorded them in the past despite the rôle that other infectious diseases have assumed in children. As a whole, the selected abstracts give a panorama of current views in pediatrics and are invaluable to the progressive pediatrician.

Formulary

Formulary and Handbook. The Johns Hopkins Hospital. Baltimore, Md.: The John D. Lucas Company, 1942. Pp. 253. Price $2.00.

The purpose of this formulary is to familiarize the hospital staff with the medicaments available in the Johns Hopkins Hospital Pharmacy. While the basis for inclusion of therapeutic materials is efficacy, simplicity and availability there is much to be desired. If the management of hospital patients were left solely to the small group of medicaments included in this handbook, the results could not possibly be as favorable as those achieved with the material omitted from this book. The favorable aspect of this compilation is the undoubted value of the therapeutic products listed. They are presented in terms of the systems for which the medical agents are indicated. It limits a diverse group of physicians practicing in one institution to the few things that are superb in the management of disease.

Seletem

A new medical publication from Buenos Aires has come to hand. It is a monthly pamphlet, the first issue of which is in the form of a booklet slightly larger than the *Reader's Digest* in format. The name of the publication is *Seletem*. The object of the publication is to offer monthly to the medical profession of Latin America various items of interest presented in a condensed form which have been taken from the medical publications of the Americas and Europe. They will attempt to present in a readily available form material which can be utilized in a dynamic way. The magazine carries no advertisements; it aims to be a purely scientific publication which will attempt to be of value to the general practitioner. In the first issue there are articles on rheumatism, osteoarthritis, tuberculosis, pulmonary diseases, poliomyelitis, purpura, cancer, and gastric conditions.

The publication should be extremely useful in Latin American countries but we think its usefulness could even be enhanced if a wider area of medical journalism was called upon for presentation rather than being limited to a rather narrow segment of the available publications in North and South America; however, this may come in time. At any rate, we wish the new publication, *Seletem*, every success.

Critique

Nutrition, Worker, and Accidents, etc. According to Children's Bureau *Bulletin 110* (Department of Labor), which related to conditions some fifteen or more years ago, the top group in the American population could afford seventy-four percent of the food they required and ninety-eight percent of the clothing; the middle group was adequate in both to the extent of only thirty and thirty-one percent, respectively, and the lowest group, the poor, had adequate diets only in twelve percent of the cases and adequate clothes only for one in one hundred. In May 1925 it was authoritatively stated in an industrial magazine that the direct economic loss from industrial accidents in the United States was over a billion a year at a time when the total value of manufactured products was only three billion dollars. In 1923 families with incomes around $1,000 to $1,100 were really in poverty, undernourished, overcrowded and household equipment deteriorating, and on the verge of acute distress. To cover minimum subsistence and some little recreation, with paid medical attention, and fair food, clothing, and housing, then required from $1,500 to $1,700 per family per year, but few got it. The conservative National Industrial Conference estimated it took $1,697.95 to maintain a Detroit family at what it called the "comfort level", but this sum was attained only by the top layer of wage earners. A California student of such conditions held that it took $2,100 a year to provide bare minimum subsistence and health requirements in that State. At that time eighty-six percent of our people fell to or below $2,000 in annual income; thirteen percent came in between $2,000 and $10,000 and one percent over $10,000. Make your own deductions. This was prosperity. Is war rationing any worse?

What We Shall Eat in 1943 Civilians have been allocated seventy-five percent of our food production in 1943; the rest goes to our armed forces and our allies. Food production in 1942 was thirteen percent above 1941, but the armed forces and our allies took twelve percent of what was produced. In 1943 they will take twenty-five percent and we can scarcely hope, even with favorable weather, to produce more than seven percent above the 1942 level. This means dietary shrinkage for civilians. Food shortages did not occur because of bungling by the OPA and the Department of Agriculture. They occurred because tremendously greater shipments were required to our armed forces and our allies than was anticipated and, more especially, because the stupendous capacity of civilian Americans to buy and consume food when they have the income to seek out a nutritious ration, simply overwhelmed us. This year expendable income for food would be much greater than last, with fewer durable goods to buy; hence food rationing had to be invoked to share scarcity equally. However, sharing scarcity is part of the total war picture. People who think they are starving whenever they cannot get a big roast or a thick steak must remember that a large majority of our people never had steaks and had roast beef only once or twice a year. It is true that at peace a third of our population went ill-fed. It is true also that an upper tenth went liberally fed. They spent plenty for food even if they did not always buy nutritionally sound diets. What rationing will do is tend to make the extremes of liberal and inadequate diet meet somewhere below moderate dietary standards, but somewhat above mere minimum adequacy, for those who can afford to purchase the food. Many of our people have been severely rationed for years, having too few ration coupons in the form of dollar bills to buy adequate diets; when they did get jobs and better incomes they went on a veritable food-buying splurge, and you can't blame them. But this is a fact: There is insufficient food allocated to civilians in 1943 for all of them to have a bare minimum adequate diet. Just remember that. This Nation never in its history has produced, processed, and distributed sufficient food to provide a liberal diet for all its people. It has never had enough even to provide a minimum adequate diet for all. Food shortage has always been with us. The food crisis is no new thing. With careful management, processing, and preparation, we shall have sufficient food in 1943 to give the majority of us a nutritionally sound diet, but some will still go inadequately nourished as at peace. Rationing will hit the liberal-diet groups hardest. Others, like the poor farmer of the story, simply can't buy all that sugar or meat or canned goods they think the Government wants to force on them. People who protest at dietary stringencies must also remember that it is wasteful to use manpower, materials, and machines to produce one bit more food than we have to have to win total war, i.e., enough to honor our commitments to our armed forces and our allies, and to give civilians here a nutritionally adequate though not an especially palatable, and probably a somewhat monotonous diet. It simmers down to whether we want to win a war or not. If we are yellow we should have apologized to Japan after Pearl Harbor for the trouble we caused her. Then a top tenth of us could have eaten liberally—but not for long.

Sex Differences in Credulity Subjects tested ranged in age from eight and one-half to twenty-two years; the findings corroborated those of other investigators that there is a real sex difference in attitude towards fortune telling. Girls persist in such activities much more generally than boys, at every age level. The difference is most pronounced from twelve and one-half to fourteen and one-half years, then the tendency decreases in girls as they tend to mature less than it does in boys. This is said to result from woman's greater emotionality and the restrictions placed upon her; she falls back on her feelings more quickly than does the male. (Lehman and Witty *J. Abnormal and Soc. Psychol.* 23:356, 1928).

Peaceful Savage Man Prof. Elliot Smith contended that man was primitively peaceful and of good intention, though politicians habitually visualize him as raw, murderous, and altogether steeped in iniquity. Anthropology, said Smith, shows that he was quiet, peaceful, and good-tempered; even modern travellers find primitives genial. Statesmanship perverts primitive morals. (*J.A.M.A.* January 19, 1929, p. 243, via *London Times*.)

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JULY 1943

Medicolegal Notes

Reading Medical Authorities on Cross Examination of Experts

In an action for injuries alleged to be due to carbon monoxide asphyxiation the defendant contended that the trial court erred in permitting plaintiff's counsel, on cross examination, to call attention to the doctors testifying to certain medical authorities. Upon examination of the testimony, the Nebraska Supreme Court found no prejudicial error in its reception or in the argument made to the jury by counsel, in which he read certain paragraphs from medical authorities which were duly in the record. Fonda vs. Northwestern Public Service Co., 292 N. W. 712. The court said:

"Cases generally sustain the right to cross examine an expert witness with reference to what medical or other authorities teach on the subject under investigation, in part reliance thereon by the witness, such cross examination being regarded as proper within reasonable limits, which is a matter largely for the court's discretion, in order to test the knowledge and accuracy of the witness. The authorities in question were not offered in evidence or any writing therefrom, and the questions were used merely to test the knowledge of the witness called by defendants. See Hutchinson vs. State, 19 Neb. 262, 27 N. W. 113; Winters vs. Rance, 125 Neb. 577, 251 N. W. 167. The rule of law, as announced therein, with reference to cross examination on medical authorities, governs."

Injury Alleged to Have Aggravated Disease Must be Proved

A claimant for compensation for an employee's death contended that deceased was hit by a "spall of stone" from a chipping hammer which resulted in angiosarcoma or aggravated preexisting angiosarcoma which caused his death about two months later.

A witness for the claimant testified that the deceased consulted him more than five weeks after the alleged accident for a lesion of the lip, a growth involving the lower lip which bled easily when touched. A biopsy disclosed angiosarcoma, a rare type of tumor. The growth was cut out but a hemorrhage resulted. The doctor testified that if there had been a direct injury to the lip and no lesion prior thereto deceased's condition was due to trauma, and that, if a prior lesion existed, an injury could have aggravated the condition.

This testimony was held admissible as to deceased's condition and symptoms, but not as to cause. "Opinions of medical experts relative to cause," the court said, "are not helpful until an accident is proved by sufficient competent evidence, either direct or circumstantial." But here there was no direct evidence of any accident having happened on the date alleged. Appeal from the referee's order of disallowance of claim was therefore dismissed. Foster vs. State Workmen's Ins. Fund, Pennsylvania Superior Court, 25 Att. 2d 760.

Successive Injuries to Eye

An apartment house janitor claimed compensation for the loss of an eye as the result of accidentally splashing some washing powder into it while washing down the apartment house stairs. The medical witnesses agreed that the claimant's eye was, unknown to him, partially dislocated before the washing powder incident, by an accident which happened twenty-seven years previously, but their evidence conflicted as to causal connection between the latter accident and the loss of the eye. The court affirmed an award, holding that the proofs established that the washing powder itself, or the instinctive wiping of the eye on the entrance of the powder, or both, completed the partial dislocation of the lens. McCadden vs. West End Building and Loan Ass'n, 126 N. J. L. 1, 17 A. 2d 65.

Aggravation of Ulcer by Nervous Tension not Compensable

An employee in a manufacturing plant during a strike supervised a restaurant within the plant for thirteen days, when he suffered from a perforated gastric ulcer, underwent an operation and died two days later. In compensation proceedings there was some evidence that deceased was subjected to a high nervous tension because of the conditions existing at the plant which caused or aggravated a duodenal ulcer, causing it to perforate, resulting in his death. It was held that this evidence of socalled injury was not supported by any proof of a physical or traumatic injury, accidental in origin and cause, which was the result of a sudden happening at a particular time. Judgment reversing judgment of the Court of Common Pleas affirming an order of the Industrial Commission dismissing the award was reversed. Shea vs. Youngstown Sheet and Tube Co., Ohio Supreme Court, 40 N. E 2d 669.

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* *References sent on request*

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New Publications Received

(We publish full lists of books received, but acknowledge no obligation to review them all. Nevertheless, so far as space permits, we shall review those in which we think our readers are likely to be interested.)

PSYCHOSOMATIC MEDICINE. The Clinical Application of Psychopathology to General Medical Problems. By EDWARD WEISS, M.D., professor of clinical medicine, Temple University Medical School, Philadelphia; and O. SPURGEON ENGLISH, M.D., professor of psychiatry, Temple University Medical School, Philadelphia. Philadelphia and London: W. B. Saunders Company, 1943. Pp. 687. Price $8.00.

INDIGESTION. Its Diagnosis and Management. By MARTIN E. REHFUSS, M.D., professor of clinical medicine and Sutherland M. Prevost Lecturer in therapeutics, Jefferson Medical College, Philadelphia. Illustrated. Philadelphia and London: W. B. Saunders Company, 1943. Pp. 556. Price $7.00.

THE METABOLIC COST OF MAINTAINING A STANDING POSITION. With Special Reference to Body Alignment. By HARRIET GRAHAM MCCORMICK. New York: King's Crown Press, 1942. Pp. 75. Price $1.25.

THE ANSWER IS . . . YOUR NERVES. By ARNOLD S. JACKSON, M.D., F.A.C.S. With a chapter by the Rev. Edwin O. Kennedy. Illustrations by Evelyn Lipman. Madison, Wisc. Published by the author, 1942. Pp. 192. Price $2.00.

CINEPLASTIC OPERATIONS ON STUMPS OF THE UPPER EXTREMITY. By RUDOLF NISSEN, M.D., New York, and ERNST BERGMANN, M.D. New York: Grune and Stratton, 1942. Pp. 88. Price $3.75.

PRACTICAL SURVEY OF CHEMISTRY AND METABOLISM OF THE SKIN. By MORRIS MARKOWITZ, M.D., associate in dermatology and syphilology, Graduate School of Medicine, University of Pennsylvania; and dermatologist to St. Luke's and Children's Medical Center, Diplomate of the American Board of Dermatology and Syphilology; and Fellow of the American Academy of Dermatology and Syphilology. Philadelphia: The Blakiston Company, 1942. Pp. 196. Price $3.50.

ATLAS OF OVARIAN TUMORS. By GEMMA BARZILAI, M.D., New York City. Preface by FRED W. STEWART, M.D., pathologist, Memorial Hospital for the Treatment of Cancer and Allied Diseases, New York City. New York: Grune and Stratton, 1943. Pp. 264. Price $10.00.

ELECTROTHERAPY AND LIGHT THERAPY. With the essentials of hydrotherapy and mechanotherapy. By RICHARD KOVÁCS, M.D., professor of physical therapy, New York Polyclinic Medical School and Hospital; attending physical therapist, Manhattan State, Harlem Valley State and West Side Hospital; visiting physical therapist, New York City Department of Correction Hospitals; consulting physical therapist, New York Infirmary for Women and Children, Mary Immaculate Hospital, Jamaica, and Hackensack Hospital. Fourth edition, thoroughly revised. Illustrated with 314 engravings and a color plate. Philadelphia: Lea and Febiger, 1942. Pp. 735. Price $8.00.

THE PRINCIPLES AND PRACTICE OF MEDICINE. Originally written by SIR WILLIAM OSLER, Bart., M.D., F.R.C.P., F.R.S. Designed for the use of practitioners and students of medicine. By HENRY A. CHRISTIAN, A.M., M.D., LL.D., Hon. Sc.D., Hon. F.R.C.P. (Can.), F.A.C.P., Hersey professor of the theory and practice of physic, emeritus, Harvard University; physician-in-chief, emeritus, Peter Bent Brigham Hospital; visiting physician, Beth Israel Hospital, Boston. Fourteenth semicentennial (1892-1942) edition. New York and London: D. Appleton-Century Company, Inc., 1942. Pp. 1475. Price $9.50.

THE SIGHT SAVER. By C. J. GERLING. New York: Harvest House, 1943. Pp. 202. Price $2.00.

A VENTURE IN PUBLIC HEALTH INTEGRATION. The 1941 Health Education Conference of the New York Academy of Medicine. New York: Columbia University Press, 1942. Pp. 56. Price $1.00.

MANUAL OF DERMATOLOGY. Issued under the auspices of the Committee on Medicine of the Division of Medical Sciences of the National Research Council. By DONALD M. PILLSBURY, M.D., MARION B. SULZBERGER, M.D., and CLARENCE S. LIVINGOOD, M.D., Philadelphia and London: W. B. Saunders Company, 1942. Pp. 421. Price $2.00.

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Prices of Male Sex Hormone Preparations Reduced

Roche-Organon, Inc., Nutley, N. J., manufacturers of hormone preparations, have announced substantial reductions in the prices of their male sex hormone preparations. The prices of Neo-Hombreol (M) Tablets (methyl testosterone tablets), the Roche-Organon oral androgen, have been reduced thirty-seven and one-half percent to forty percent. Neo-Hombreol Ampuls (testosterone propionate ampuls), the Roche-Organon parenteral androgen, have also been reduced ten percent in price. In view of the reduced prices, the company says that now practically no patient who requires male sex hormone therapy need be denied its benefits.

The new reduced prices are now in effect at all pharmacies and physicians' supply houses, on all sizes and strengths of the two Roche-Organon androgens. Neo-Hombreol (M) Tablets are available in 10-mg tablets, boxes of 15, 30 and 100. Neo-Hombreol Ampuls are available in 1-cc ampuls of 5-mg, 10-mg, and 25-mg strengths.

Tarbonis Cream

The increased incidence of industrial dermatoses resulting from exposure to various irritants by large numbers of persons unused to such chronic irritation, constitutes a national problem not only on the production line but in the physicians' office as well. Tarbonis Cream, manufactured by The Donald Merrell Company of Cincinnati, is recommended for the treatment of all industrial dermatoses. It is also highly effective in treating infantile eczema, seborrheic and eczematoid dermatitis, folliculitis, and other skin irritations.

Excellent results from the use of this cream over a period of eight years are reported from a large eastern medical institution in whose pharmacy the original formula was developed. Many medical directors in industrial plants report that Tarbonis Cream has practically abolished occupational dermatitis in their organizations.

Tarbonis Cream contains liquor carbonis detergen, lanolin U.S.P. and menthol in a bland vanishing cream base. It is available through accredited physicians supply houses in all larger cities and may be prescribed by name. Further information and clinical samples may be obtained from The Tarbonis Company, 1220 Huron Road, Cleveland, Ohio.

OCD Advises Gas Cleansing Stations at Hospitals

The Medical Division of the Office of Civilian Defense advises that plans be made immediately for the establishment in hospitals of "gas cleansing stations" for the care of injured persons who have been exposed to war gases, and large communities should establish at least one gas cleansing station for training purposes.

The primary purpose of gas cleansing stations is the protection of hospitals and casualty stations and their staffs and patients from contamination by injured persons who have been exposed to vesicant agents. Contaminated persons who are not disabled are expected to cleanse themselves in the nearest private home or in other local facilities. Every hospital that may be required to handle an appreciable number of casualties should have access to such facilities.

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Sulfamerazine, a New Sulfonamide Compound

A new sulfonamide compound possessing distinct advantages over sulfadiazine and sulfathiazole has been announced. Sulfamerazine, a development of the Medical-Research Laboratories of Sharp & Dohme at Philadelphia, is 2-sulfanilamido-4-methylpyrimidine, or sulfamethyldiazine. Reports of the pharmacological and clinical characteristics of this new drug were made by Drs. Franklin D. Murphy, John K. Clark, Harrison F. Flippin, and Elizabeth Patch, in the May issue of the *American Journal of the Medical Sciences* and by Arnold D. Welch, Paul A. Mattis, Albert R. Latven, Wilbur M. Benson and Ethol H. Shiels in the April issue of the *Journal of Pharmacology & Experimental Therapeutics*.

In comparison with sulfadiazine, sulfamerazine proved to be more rapidly and completely absorbed from the gastrointestinal tract and more slowly eliminated by the kidneys. Thus, smaller or less frequent doses of sulfamerazine are necessary to produce and maintain therapeutic concentrations in the blood. Moreover, sulfamerazine is less expensive to manufacture than sulfadiazine. These factors indicate that the new drug will not only simplify sulfonamide treatment but will greatly reduce its cost.

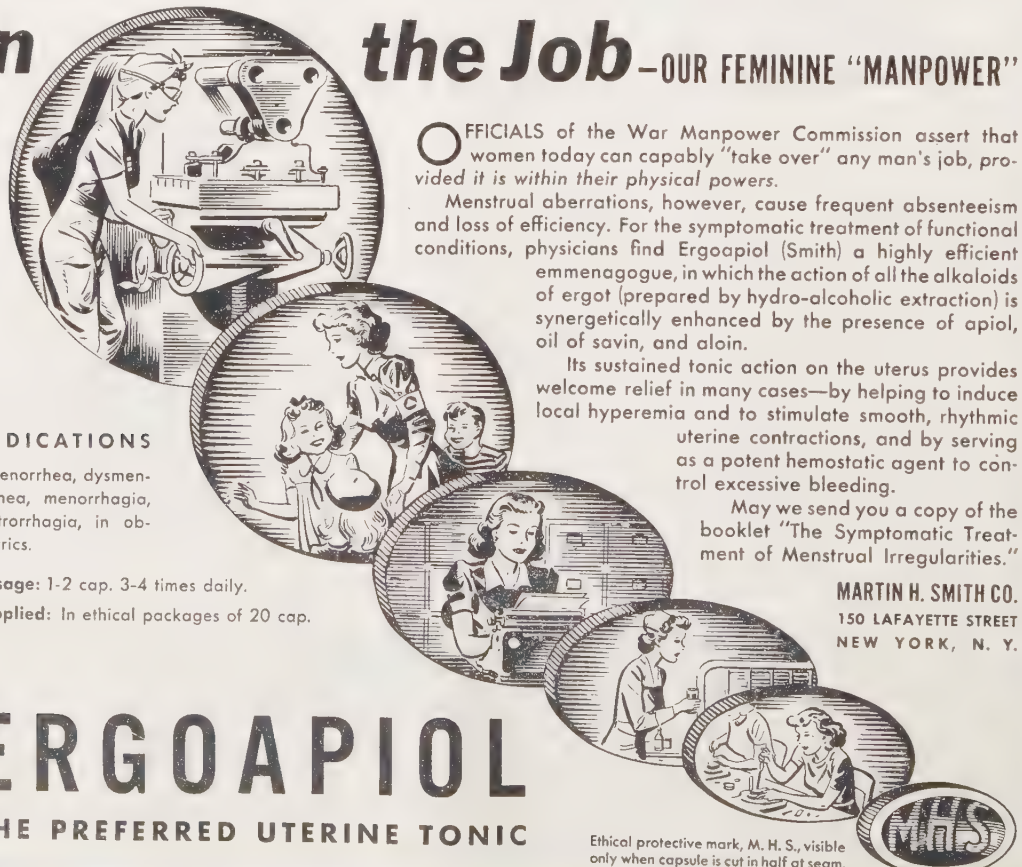
It is stated in the report by Dr. Welch and his associates in the Medical Research Division of Sharp & Dohme that clinical administration of only 0.5 Gm. of sulfamerazine per kilogram of body weight (3.5 grams or 53 grains for a 150-pound man) produces an average concentration of approximately 8 mg. per 100 cc. of blood within two hours after oral administration, rising to about 10 mg. percent in four hours. A concentration greater than 6 mg. per 100 cc. of blood is maintained for twenty-four hours after this single, initial dose, diminishing to about 3.5 mg. percent during the next twenty-four hours. When sulfadiazine was given to the same individuals in the same dosage an average concentration of about 3 mg. per 100 cc. of blood was produced within two hours, reaching a peak of 5 mg. percent in four hours; after twenty-four hours the blood level was reduced to 2 mg. per 100 cc.

The comparatively slow rate at which sulfamerazine is excreted by the kidneys represents a double advantage: 1, Therapeutic blood levels are maintained for longer periods, and 2, lower concentrations of the drug should appear in the urine at any given time. The second point, together with the fact that sulfamerazine and acetylsulfamerazine are more soluble in neutral or acid urine than the corresponding forms of sulfadiazine, offers additional protection to the urinary tract from the possibility of formation of drug concretions.

In a study of twenty-eight convalescent patients serving as controls and twenty patients suffering from acute bacterial infections, Drs. Murphy, Clark and Flippin found that after a single, oral three-gram dose of sulfamerazine higher blood levels are obtained more rapidly and sustained longer than after an equal dose of sulfadiazine. Intravenous administration of the sodium sulfamerazine resulted in high blood concentrations of the compound shortly after injection. In fact, the blood concentrations and rate of disappearance of sulfamerazine four hours after a given dose are about the same regardless of the route of administration, except for the fact that sulfamerazine is not absorbed

(Continued on page 442)

On the Job—OUR FEMININE "MANPOWER"



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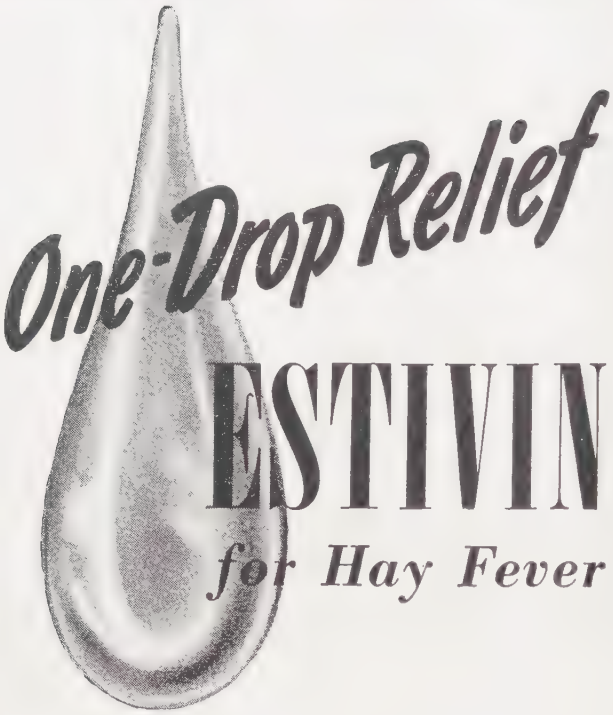

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One drop in each eye 2 or 3 times daily is generally sufficient to keep the average patient comfortable during the entire hay fever season. In the more severe cases, additional applications whenever the symptoms recur will assure relief throughout the day.

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rectally. Dr. Flippin and his associates also found that sulfamerazine readily penetrates cerebrospinal, pleural and ascitic fluids.

Sulfamerazine is administered orally for its antibacterial effect in the treatment of infections caused by pneumococci, streptococci, meningococci and gonococci. Elaborate toxicity studies, already independently confirmed, show that sulfamerazine is at least as safe as sulfadiazine and may be even safer, especially with regard to possible urinary complications. The unique pharmacological characteristics of sulfamerazine demonstrated in preliminary clinical trials offer the definite possibility that an adequate concentration of sulfonamide in the blood and other tissues may be maintained by the administration of only one, two, or three doses daily, as contrasted to about four to six doses when other sulfonamides are given. Further, because of the slow excretion of sulfamerzine, its use as a prophylactic against bacterial infections is definitely indicated.

The Treatment of Vaginitis

Edward Allen and Hugo C. Baum, Chicago (*Amer. Jour. Obstet. and Gynec.* 2:45:246-253 (February) 1943) state that while the treatment of vaginitis is still a common problem in gynecological practice, the multiplicity of methods reported in the literature is evidence that no treatment thus far described has proved adequate. The authors present a report covering a period of one and one-half years, which gives the results obtained in a study of 282 patients treated by the instillation into the vagina of a buffered acid, water dispelling jelly. No other method was used. Fifty patients were treated in private practice and the remaining 232 at the Central Free Dispensary and Presbyterian Hospital Obstetrical Clinic, Chicago. The jelly and technical service were supplied by Ortho Products, Inc., Linden, N. J.

In this investigation the acidity of this vaginal jelly, also its composition, was varied by the addition of varying concentrations of sulfathiazole, sulfanilamide, gentian violet, or iodine. An effort was made to evaluate the causes of failure or success on the basis of adequacy of treatment or the rôle of primary and secondary foci of reinfection. The general plan of investigation was as follows:

A detailed history of each patient was taken, with special emphasis on the nature of vaginal, urinary and gastrointestinal tract symptoms. Most of the patients presented combinations of the usual symptoms of vaginitis, but symptoms referable to the urinary tract were almost as common as vaginal discomfort. Many patients with urinary symptoms presented no evidence of infection while occasionally there were positive findings in patients without urinary symptoms.

Physical findings varied. The vulvar skin manifestations ranged from normal skin to widespread vulvitis. The vaginal mucous membrane was occasionally normal in appearance but usually showed evidence of congestion or petechiæ. Cervical erosions, polyps, Nabothian cysts, or other common causes of leucorrhea were frequently found. Tender indurated sacrouterine ligaments were a rather common finding.

Unlubricated speculum examination always preceded other manipulation. The type of vaginitis was identified by microscopic examination of an unadulterated wet smear and gram stain. In questionable cases the secre-

(*Continued on page* 444)

Tropical Medicine Research

The medical advisory committee of the American Foundation for Tropical Medicine, Inc., during the first quarter of 1943 authorized grants to six North American Medical Schools totaling $26,100. These grants, made possible by contributions and pledges for the current year of $60,100 by nineteen American corporations, are being used to strengthen teaching or research programs in tropical medicine and parasitology at the various schools. The approved projects were selected by the medical committee.

Medical schools to receive aid are: New York University, College of Medicine; Tufts College Medical School; Tulane University School of Medicine; University of Manitoba Faculty of Medicine; University of Nebraska College of Medicine and Yale University School of Medicine. Among the companies which have made contributions or formal pledges of support are: Abbott Laboratories; American Cyanamid Company; Ciba Pharmaceutical Products Corp.; Hoffmann-La Roche, Inc.; Lederle Laboratories; Eli Lilly and Company; Merck & Co., Inc.; Parke Davis and Company; E. R. Squibb & Sons; William R. Warner & Company; Winthrop Chemical Company; Winthrop Products, Inc.; and John Wyeth & Brother.

Lt. Col. Thomas T. Mackie, Division of Parasitology, Army Medical School, is president of the Foundation; Dr. Willard C. Rappleye, dean of the College of Physicians and Surgeons, Columbia University, is vice-president; and Dr. J. A. Curran, dean of the Long Island College of Medicine, is executive officer. Dr. Theodore G. Klumpp, president of Winthrop Chemical Company, and Dr. Henry E. Meleney, professor of preventive medicine, New York University, are members of the executive committee.

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In each fluid ounce: Thiamin hydrochloride, 5 mg.; riboflavin, 2 mg.; niacinamide, 10 mg.; calcium pantothenate, 1.5 mg.; pyridoxine, 0.75 mg.; amino acids (and hydrolyzed protein derivatives), 1.8 Gm.; carbohydrates, 4 Gm.; with alcohol (as a fine wine), 19.5% by volume; with coloring and flavoring.

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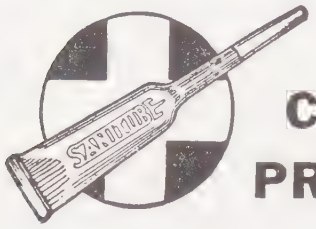

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tion was cultured. All urine examinations were made on catheterized specimens. Trichomonas were seldom found in the whole specimen. Whenever possible cystoscopic examinations were made and repeated when indicated. Sputum and stool specimens were examined. The authors do not believe that stool examination will reveal the true incidence of intestinal trichomonas.

A summary of the results of their study is presented in the following table:

		TOTAL NO STUDIED	CURED: VAG.	CURED: BLAD.	RELIVED SYMPTOMS	INSUFF. TREAT.*	NOT CURED	CURED PERCENTAGE OF TOTAL CASES STUDIED	CORRECTED PERCENTAGE OF CASES †
		282							
Trichomonas	Preg.	29	11	3	26	5	13	37.9	45 8
	Nonpreg.	137	53	16	107	42	42	38.6	55 7
Trichomonas and monilia	Preg.	12	1	1	10	9	2	8.3	33.3
	Nonpreg.	4	3		4	0	1	75.0	75 0
	Preg.	40	26		38	12	3	65.0	92 8
Monilia	Nonpreg.	20	14		17	3	2	70 0	82 3
	Preg.	3	3		3	0	0	100 0	100 0
Nonspecific	Nonpreg.	37	24		34	10	3	64.8	88.8

*Contains those patients who abandoned treatment and could not be followed. Their ultimate condition at time of discontinuance is unknown. Some of the latter had experienced relief of symptoms before discontinuing visits.

†Corrected percentage of cures eliminates those who had insufficient treatment according to our standards.

The authors conclude that the instillation of a buffered acid jelly is an effective and acceptable method for the treatment of vaginitis. They found that the addition to the jelly of various chemicals had not increased the number of ultimate cures, that irritation was often aggravated by the addition of gentian violet, and that the addition of sulfanilamide or sulfathiazole had not increased the efficacy of the basic jelly. A shift in vaginal pH toward normal vaginal acidity can probably be produced by a buffered acid jelly. Symptomatic relief can be obtained by this method in a large percentage of patients (eighty-four percent in this series), and a large number of apparent cures of monilia and nonspecific infection are reported. The percentage of cures obtained compare favorably with methods previously used by the authors and final cure has not been as frequent in their hands by any method as has been reported in many clinics. The treatment of concomitant urinary tract infection helped to increase their number of good results.

Staff Changes at Winthrop Chemical Company

Edward Dawson Davy, dean of the School of Pharmacy, Western Reserve University, Cleveland, has been appointed director of the Pharmaceutical Division of the Winthrop Chemical Company. He will make his headquarters at the Winthrop plant at Rensselaer, N. Y. Mr. Davy was associated with Western Reserve University for twenty-one years, serving as professor of pharmaceutical chemistry until his appointment as dean of the School of Pharmacy in 1940. He also served on the Committee of Revision of the U. S. Pharmacopoeia from 1930 to 1940, and is a member of several scientific societies.

The election of Dr. A. E. Sherndal, plant superintendent, as vice-president of the company, has also been announced. Dr. Sherndal has long been associated with the company. He recently was awarded an honorary degree of Doctor of Science by St. Lawrence University for his research work in the synthesis and manufacture of atabrine, synthetic substitute for quinine in the treatment of malaria, entirely from raw materials available in the United States.

A New Vaginal Cream

Allantomide Vaginal Cream, a new product for the control and cure of certain conditions of the vagina, cervix, and vulva, has been announced by the National Drug Company, of Philadelphia, manufacturers of biologicals and pharmaceuticals.

Allantomide Vaginal Cream "National" contains fifteen percent sulfanilamide, two percent allantoin in a specially developed hydrophilic base buffered to a pH of 4.5 with lactic acid. It is odorless and stainless, its action is purely locally, and it offers a prompt, convenient, and effective method for treating many ulcerative lesions of the lower genital tract of women.

Many authorities claim that sulfanilamide is the sulfonamide of choice for topical use, because of its solubility and quick bacteriostasis. The experience of the National Drug Company with its Allantomide ointment has shown this to be true. According to other studies, allantoin is a stimulant to healing in burns, wounds, and ulcerations.

Allantomide Vaginal Cream "National" is indicated for use on the following lesions of the cervix, vagina, and vulva: gonorrheal cervicitis and vaginitis, vaginal and vulval condylomata, chancroids, acute trichomonas vaginalis vaginitis, granuloma inguinale, lymphopathia venereum, and post-cauterization wounds of the cervix. The manufacturers state that, "while Allantomide Vaginal Cream is not curative for such lesions as condyloma acuminatum, granuloma inguinale and lymphopathia venereum, it reduces rapidly nonspecific secondary infections to a minimum."

Allantomide Vaginal Cream is available in 4 oz. tubes, supplied with or without applicator.

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REFERENCES: Clinical Observation on The Treatment of Pertussis with Gold Tribromide (Elixir Bromaurate). Medical Clinics of North America. Sept. 1938.
Gold Tribromide (Elixir Bromaurate) in the Treatment of Pertussis. Report of 450 Cases. Medical Record, August, 1939.

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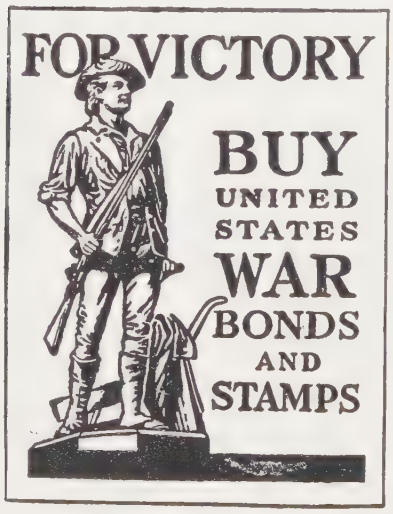

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Maternity Care for Wives of Servicemen

Twenty-three state health agencies are now authorized to provide maternity care for wives of men in the four lowest pay grades of the armed forces, and medical hospital and nursing care for their babies, both without cost to the family, according to an announcement by the Children's Bureau of the U. S Department of Labor. Under the approved plan, wives of these servicemen may receive complete medical care during pregnancy, childbirth, and six weeks after. At childbirth, whether the wife stays at home or goes to a hospital, she and her baby may have medical and nursing care. Medical care is also provided for the baby throughout his first year of life. All that the wife needs to do to apply is to fill out a simple form which she can get from the state health department.

The program submitted by twenty-three states has already been approved. Other states have similiar plans which will be acted upon soon.

Grants for Infantile Paralysis Research

Twenty-eight grants, totaling $354,370, have been made by The National Foundation for Infantile Paralysis to universities, hospitals, laboratories and other organizations in eleven states to continue the fight against the disease.

Sixteen grants, totaling $216,020, were made for virus and after-effects research. Four of these are on long-term projects being conducted at Yale University, Johns Hopkins University, the University of Michigan, and the University of Wisconsin.

Twelve grants, totaling $138,350, were made for various educational programs including the training of technicians in the Kenny method of treatment. Some of these grants include projects for educational work for physicians and the public. The sum of $2,500 was appropriated for the preparation of a complete bibliography on poliomyelitis. The compilation is being done for the Foundation with the aid of the library of the American Medical Association and the John Crerar Library, both in Chicago.

Institutions which received grants are: Stanford University and the University of California, $33,000; Yale University, $37,200; Warm Springs, Ga., $16,700; State University of Iowa, $1,000; Johns Hopkins University, $38,320; Harvard Infantile Paralysis Commission, Children's Hospital, and the Massachusetts General Hospital, Boston, $24,700; University of Michigan, Michigan Department of Health, and Wayne University College of Medicine, Detroit, $64,950; five New York institutions, $64,650; University of Pennsylvania and D. T. Watson School of Phthisiotherapy, $14,500; University of Wisconsin, $15,600.

Tuberculosis Prevention

The last world conflict sent tuberculosis rates soaring in the nations of Europe and brought about a slight rise even in this country, says Dr. C. M. Sharp, U. S. Pub. Health Service. Today, he continues, increases are noted throughout Europe, but we hope to prevent an increase in this country. There is still time to lay down an effective barrage which could prevent a rise due to the war. Although we have no apparent increase yet, the circumstances of overcrowding, unsanitary living conditions, and undue fatigue are strikingly apparent to everyone.

Tuberculosis strikes down the very individuals who are most valuable as war workers—men and women between the ages of twenty and sixty. When protected from this disease, they are the human assets upon which the presumption of victory is based. When attacked by tuberculosis—and one per cent of our manpower is attacked—they become liabilities who perform their jobs inefficiently, join the rolls of the absenteeism club, and unwittingly, yet relentlessly, spread sickness to others.

Early discovery of tuberculosis is only the beginning of the story. There must be follow-up of all newly discovered cases, including after-care and rehabilitation of arrested cases that stay on the job after medical supervision, as well as active and infectious cases that require sanatorium care or out-patient ambulatory care during convalescence.

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Dr. Winnek, New Director of Research at Pitman-Moore Co.

Dr. Philip S. Winnek, the inventor of Sulfaguanidine and co-inventor of Sulfadiazine, has been appointed director of research of Pitman-Moore Co., Indianapolis, Ind., manufacturers of pharmaceutical and biological preparations.

Several patents in the field of chemotherapy are held by Dr. Winnek and he has other patents pending. He is the author of publications on the physiochemical properties of aminoacids, the rôle of bromine in nutrition and studies in chemotherapy of the sulfonamides. Dr. Winnek obtained his A.B. degree in chemistry at Stanford University in 1931; his Ph.D. in biochemistry at the University of California in 1935, and he won the Sterling Fellowship in physiological chemistry at Yale, 1935-1937. He comes to the Pitman-Moore Co. from the American Cyanamid Co., where he has been engaged in research chemistry for the past six years.

Price Reduction

Since it has been demonstrated that testosterone preparations are of value not only in androgenic deficiencies, but are also of great benefit in certain gynecological disorders, the use of the male sex hormone has increased rapidly. This, combined with recently developed manufacturing economies, permits a reduction in the price to both physician and patient of Oreton (testosterone propionate) by injection and Oreton-M tablets (methyl testosterone) by mouth. In the latter part of June, the Schering Corporation of Bloomfield, N. J., announced a price reduction that will be welcomed by all physicians. Oreton-M tablets have been reduced by approximately forty percent and Oreton, for injection, approximately ten percent.

A New Sugar

Dr. Royal Lee, president of the Lee Foundation for Nutritional Research, in an address delivered on June 15th before the thirtieth anual convention of the Northeastern Dental Association, at Swampscott, Mass., announced a new method of extracting sugar from cane juice by means of which twice the amount of sugar was obtained, and at the same time the natural vitamins and minerals of the cane juice, now lost in sugar refining, were retained. Dr. Lee said that the new sugar was nothing more than cane juice which had been dehydrated. Nothing was removed but the water. The methods used in the process are somewhat similar to those used in dehydrating blood serum.

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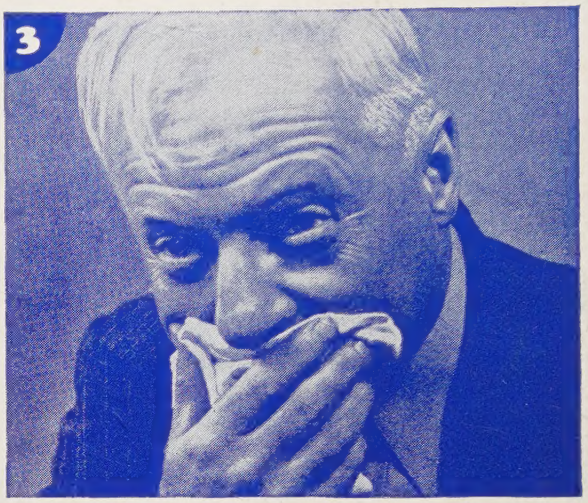

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